CHAPTER 33

SURGICAL SERVICES DEPARTMENT

STANDARD OPERATING PROCEDURE

500 BED FLEET HOSPITAL

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#### STANDARD OPERATING PROCEDURES

#### SURGICAL SERVICES DEPARTMENT

A. <u>MISSION:</u> Render acute medical and surgical care to ambulatory patients processed through Casualty Receiving.

#### B. **FUNCTIONS:**

- 1. Capable of minor surgical and diagnostic procedures: During peak workload periods, may be used as an alternative area for minor surgical procedures under local anesthesia.
- 2. Not intended for reconstructive and/or elective surgical procedures, rehabilitation, fluoroscopic procedures, major surgical procedures, or as a recovery room  ${\bf r}$

### C. PHYSICAL DESCRIPTION:

- 1. Specialty Treatment Unit:
  - (a) Location within complex:
  - (b) Sheltering.

Type: Temper Tent.

Quantity: Ten sections.

(c) Material:

IOL: 0016-0018, STOB, STOC, STOD, STOE

## D. SPECIAL CONSIDERATIONS:

- 1. The specific use of the Specialty Treatment Area and minor  $\mathsf{OR}$ 's will depend upon the workload.
- 2. Patient flow will be controlled by the ambulatory care nurse; in his/her absence by the senior corpsman. If a backlog problem exists the nurse will notify Casualty Receiving Area.
- 3. Physician assistants who may be assigned to the Specialty Treatment Area will work under the supervision of a physician.

### E. WORKLOAD:

- 1. Steady state: 80 admissions/day 54 Surgical, 26 Medical
- 2. Peak state: 120 admissions/day 80 Surgical, 40 Medical
- 3. Special considerations:.
  - (a) Patients will be received from:
    - (1) Casualty Receiving.

- (2) In house referral.
- (3) Military sick call.
- (b) Hours of operation during steady state:.
- (1) AM watch 0700-1900 Monday through Saturday: fully operational.
- (2) AM watch 0700-1900 Sundays and night watch 1900-0700: One minor OR table operational; other spaces available through specialty treatment control desk.
  - (3) Military sick call: 0730 and 1930 hours daily.

### F. ORGANIZATION:

- 1. Responsibility: The Ambulatory Care Nurse who reports to the Head, Surgical Department is assigned day to day management responsibility. The Head, Surgical Department stipulates policy for the Specialty Treatment Area.
  - 2. Organizational chart:

HEAD, SURGICAL DEPARTMENT

AMBULATORY CARE NURSE 0935

OTL	ORTHO	OCULAR	HOSPITAL
TECH	TECHS	TECH	CORPSMAN
8446	8445	0000	

- 3. Staffing.
  - (a) Criteria.
- (1) One Medical Officer is assigned on AM watch to Specialty Treatment Area by Medical Services Department. The OR Prep and Hold Physician is on call to Specialty Treatment Area on night watch.
- (2) One orthopedic surgeon, one cast room tech, one HM are assigned by Orthopedic Department to each watch in Specialty Treatment Area.
- (3) The Otolaryngology Treatment Area is staffed by the OTL Tech as assigned by the Otolaryngology Department.
- (4) The Ophthalmology Treatment Area is staffed by the Ocular Tech assigned by the Ophthalmology Department.
- (5) Five physician assistants are assigned to the Specialty Treatment Area by Medical Services Department. They are subject to activation to a treatment team in Casualty Receiving Area.
- (6) Three hospital corpsmen are assigned by Nursing Service on AM watch; two hospital corpsmen on night watch.
  - (b) Special qualifications required.

(1) Minor surgery under local anesthesia may be performed by emergency medicine and family practice physicians as well as surgeons.

(c) Staffing pattern: Two 12 hour watches.

Personnel	AM Watch	Night Watch	Total Assigned
Medical Corps+	2	1 *	3
Nurse Corps	1	1*	2
Physician Assistants+	2	2	4
HM	6	3	9
Other Ratings			
Ocular Tech+	1	0 *	1
OTL Tech+	1	0 *	1
Cast Room Tech+	1	1	2
Ortho HM+	1	1	2

- \* Additional personnel on call
- + Assigned by respective department
  - 4. Assignments by Billet Sequence Code: See TAB A, page 17.
  - 5. Watch Bill: See TAB B, page 18.
  - 6. Special Watches: N/A.

#### G. TASKS:

#### TASK

#### 1. MAINTAIN READINESS

# 1.1 COORDINATE WORKLOAD

#### METHOD

- 1. Staff, maintain supplies and equipment in Specialty Treatment Area to support the delivery of acute medical and surgical care to the ambulatory patient.
- 1.1 The departmental office will coordinate requests for minor surgery room time and will prepare a daily minor OR schedule Personnel assigned to the office include the Head, Surgical Department and the Specialty Treatment Area Nurse. The office will perform the following:
- 1.A Prepare a daily minor OR schedule and distribute to patient care areas by 1600 the preceding day.
- 1.1.B Revise minor OR schedule to reflect changing patient priorities and needs of incoming patients requiring minor surgery.
- 1.1.C Notify anesthesia department of cases in the minor OR requiring their services.
- 1.1.D Make daily assignment of staff.

Orthopedics, otolaryngology and ophthalmology spaces staffed by respective services.

#### 1.2 CHECK ALL SUPPLIES

- 1.2.A Orthopedic Tech will check all orthopedic/podiatry instruments and appliances in Specialty Treatment Unit, minor surgery.
- 1.2.B Orthopedic Tech will ensure daily that supplies of casting materials, splints, crutches and canes are available.
- - Epistaxis trays (3).
  - Nasal fracture set (3).
  - Peritonsillar abscess tray (2).
  - Sinus irrigation set (3).
  - Minor laceration suture set (1).
- 1.2.D OTL Tech will inventory ORL treatment area supplies and linens; restock as necessary.
- 1.2.E Ocular technician will inventory all ophthalmology supplies and instruments in Specialty Treatment Unit and minor surgery and restock as necessary.
- 1.2.F Corpsman will inventory and restock all equipment, supplies, medications, and forms in the minor OR/treatment areas. Senior Corpsman will order those items needed.
- Order supplies on the Controlled Consumables/Equipage Requisition (TAB F-29) from Material Management.
- Order medications by 1000 daily from Pharmacy on a Drug Requisition Sheet. Scheduled medications will be ordered on a DD 1289.
- Return outdated drugs to Pharmacy for disposal.
- Order linen daily by 0800 for the following day using Request for Clean Linen/Laundry (TAB F-30).

- Order sterile linen packs/instruments from CSR.
- 1.3 INSPECT ALL EQUIPMENT
- 1.3.A Check emergency equipment for proper function each watch. Record date, watch and discrepancies noted on Emergency Equipment Checklist (TAB F-3).
- 1.3.B Perform operator maintenance on all equipment required to support a procedure IAW the manufacturer's instructions or technician manual.
- 1.3.C Inspect equipment electrical connectors, cords, and switches daily for function/wear/fit.
- 1.3.D Label any defective minor equipment and instruments.
- 1.3.E Report major equipment malfunction to nurse who will notify Medical Repair Division.
- 1.3.F Notify CSR supply clerk of replacement equipment that must be ordered.
- 1.3.G Inspect pressure in gas cylinders for power equipment, anesthesia machines, oxygen, and tourniquets. If less than 500 p.s.i, replace tank.
- 1.3.H Ensure that cylinders are properly secured and stored.
- 1.3.I ORL Tech will perform calibration of audiometric equipment weekly.
- 1.4 All personnel will be able to operate equipment safely IAW the equipment operating manuals.
- 1.4.A Operate OR table demonstrating all positions of table and proper placement of attachments.
- 1.4.B Operate surgical overhead lights.
  - Focus light on operating field.
- 1.4.C Operate vacuum cleaner in either the wet or dry mode IAW operating manual.
- 1.4.D Position the hanger assembly for IV solutions at a particular location and height.

1.4.D IV FLUIDS HANGER

1.4.B SURGICAL LIGHTS

1.4 TRAIN PERSONNEL TO

EOUIPMENT

1.4.A OR TABLE

OPERATE SPECIAL MEDICAL

1.4.C WET-DRY VACUUM CLEANER

- 1.4.E ELECTROSURGICAL APPARATUS 1.4.E Operate Electrosurgical Apparatus (BOVIE)
  - safely IAW TAB C-1.
- 1.4.F SUCTION MACHINE
- 1.4.F Set up thoracic suction for closed chest drainage IAW TAB C-2 and TAB C, enclosure (A).
  - Attach tubing correctly.
- Check pressure calibration for 15 psi.
- 1.4.G DEFIBRILLATOR
- 1.4.G Set up defibrillator IAW SOP on Defibrillation, TAB C-3.
- Attach defibrillator to a battery charger when not in use.
- 1.5 PREPARE FOR MINOR SURGERY
- 1.5 Clean Minor Surgery Area IAW TAB C-4 and TAB E-5. Cleaning and set up time will not exceed 30 minutes.
- 1.5.A Corpsman obtain instrument sets, equipment, and supplies needed for Minor OR procedures:
- All procedures require prep set, surgical drapes, and gloves.
- Use procedure cards (TAB G-4) to select and gather the correct instruments, and supplies needed.
- Obtain sterile supplies and linen packs from the storage cart.
- Remove sterile supplies from the right side of shelf (use the oldest supplies first).
- Notify Senior Corpsman if there are insufficient sterile supplies available. If there will be a time delay in getting an item, notify the Nurse.
- 1.5.B Assemble all equipment, intruments, and supplies for procedure in minor OR.
- Prepare OR table for procedure by attaching any special devices or attachments.
- Don surgical cap, surgical mask, and scrub top.

- Place linen pack on instrument table, open wrapper establishing sterile field.
- Open sterile supplies, instruments, and gown on to sterile field.
- Don sterile gloves IAW TAB C-5. Arrange sterile supplies, instruments, gown on instrument table.
- 2. PROVIDE NURSING CARE
- 2. Provide nursing care during assessment, evaluation, treatment, and disposition of ambulatory patient.
- 2.1 RECEIVE PATIENTS
- 2.1 Control Desk Corpsman will:
- 2.1.A Triage emergent patients for immediate care.
- 2.1.B Log all patients in Specialty Treatment Area Log (See TAB G-1).
- 2.1.C Initiate documentation on Chronological Record of Medical Care, SF 600.
- 2.1.D Take and record vital signs, chief complaint, allergy history.
- 2.1.E Direct patient to appropriate clinical area.
- 2.2 ASSESS PATIENTS
- 2.2 Perform nursing assessment relative to
  chief complaint:
- 2.2.A Obtain history.
- 2.2.B Assist with/perform physical examination.
- 2.2.C Initiate diagnostic tests as ordered, lab, x-ray, EKG, etc.
- 2.3 INITIATE TREATMENT PLAN
- 2.3.A Perform treatment procedures IAW Nursing Procedure Manual (See TAB F-1) and departmental SOP.
- 2.3.B Instruct patient in self care (as applicable) and procedure for any follow up care.
- 2.3.C Direct patient to checkout at control desk. Complete log entry.
- 2.3.D Direct/provide transportation to

Casualty Receiving Area for all patients being admitted.

# 2.4 PROVIDE PRE-OPERATIVE NURSING CARE

- 2.4.A Provide pre-operative nursing care.
- Verify patient identification. Ask patients name and SSN and compare to accompanying medical record.
- Verify that request for Admininistration of Anesthesia and for Performance of Operations and Other Procedures (SF 622) have been signed and witnessed.
- Ensure vital signs taken, allergy history obtained.
- Initiate Pre-operative Nursing Notes for Minor Surgery (TAB G-15).
- Reduce patient anxiety by explaining procedures.
  - Inspect surgical site
- Obtain x-rays as indicated (orthopedic procedures, foreign body removal).
- 2.4.B Provide intra operative nursing care.
- Position patient on OR table. secure with safety strap.
- Perform the following options as needed:
- Apply a tourniquet to extremity over a of webril IAW TAB C-8.
- Attach grounding pad for electrosurgical unit IAW TAB C-1.
- Shave and prep surgical site with appropriate solution (TAB C-7).
  - Assist surgeon as needed:
  - Obtain supplies.
  - Adjust lights.
  - Adjust settings on electrosurgical unit.

- Monitor patient's status during procedure by observing:
  - Bleeding.
  - Color.
  - P, R, BP.
  - Pain perception.
  - Mental status.
- Report deviations immediately to the surgeon.
- 2.4.C Provide immediate post operative nursing care.
- Assess post-op condition by observation of:
  - Bleeding.
  - Color.
  - T, P, R, BP.
  - Pain perception.
  - Mental status.
- $\,$  Report deviations immediately to the surgeon.
- Instruct patient in wound care and procedure for follow-up care.
- Complete Pre-operative Nursing Note for Minor Surgery.
- Enter case in Minor OR Log (TAB G-5).
- Direct patient to check out at control desk. Complete Specialty Treatment Area Log entry.
- Send laboratory specimen(s) to lab, tissue specimens to Pathology accompanied by Tissue Examination SF 515.
- 2.5 PROVIDE EMERGENCY CARE
- 2.5 In the event of cardiac/respiratory
  arrest all personnel must be able to:
- 2.5.A Rapidly obtain and assemble all

emergency equipment and medications.

- 2.5.B Operate the emergency equipment outlined in tasks 1.4A 1.4H.
- 2.5.C Perform basic life support CPR IAW the American Heart Association Guidelines and IAW TAB C-9.
- 2.5.D Complete Cardiac Arrest Flow Sheet, FHCS 0403.
- 2.5.E All personnel will respond to medical emergencies IAW TAB C-10.
- 2.6 CARE FOR DECEASED PATIENT
- 2.6 Provide care for patient who dies IAW the Nursing Procedures Manual, TAB F-1.
- 2.6.A Prepare Notice of Death, NAVMED 6320/5 in duplicate and obtain attending surgeon's signature.
- 2.6.B Record on Chronological Record of Care, SF 600, the time of death, medical officer making the pronouncement and the name of individual contacted to secure deceased's personal effects.
- 2.6.C Prepare body IAW TAB F-1.
- 2.6.D Notify the Command Duty Officer, Chaplain, Patient Care Coordinator, and Director of Surgical Services.
- 3. PERFORM LEADERSHIP TASKS
- 3. Provide training and supervision to assist personnel to advance their clinical and administrative abilities.
- 3.1 PROVIDE CONTINUING EDUCATION 3.1.A Provide orientation to the Specialty Treatment area IAW TAB E-4.
  - 3.1.B Nurse or designated representative will evaluate staff skills prior to assigning more complex duties.
  - 3.1.C Cross-train personnel in specialty, direct and indirect care areas.
  - 3.1.D Provide senior personnel with experience in administration, clinical teaching and supervision.
  - 3.1.E Conduct classes on special procedures, principles, and equipment
  - 3.1.F Support interdisciplinary classes provided by personnel from specialty areas.

- 3.2 PROVIDE SUPERVISION
- 3.2 Nurse will supervise all nursing of Personnel activities.
- Provide performance counseling to all personnel on a continuing basis.
- Provide supervision and/or assistance to staff working in the area.
- 3.3 MONITOR INCIDENT REPORTS
- 3.3 Incidents will be reported on Incident Report Data Sheet, NAVMED 6010/14, reviewed by Nurse, and sent to Head, Surgical Department.
- 3.3.A Nurse will monitor all incident reports and counsel personnel as needed.
- 3.3.B Provide educational programs that directly relate to incident report.
- 3.3.C Prepare an after action report for Head Surgical Department, with copy sent to Nursing Services Department.
- H. STANDARD OPERATING PROCEDURES: See TAB C, page, 23.
- I. CLINICAL POLICIES/GUIDELINES: See TAB D, page 97.
- J. STANDARDS AND JOB DESCRIPTIONS: See TAB E, page 100.
- K. DOCUMENTATION:
  - 1. REFERENCES: See TAB F, page 117.
  - 2. FORMS: See TAB G, page 118.

TAB A
ASSIGNMENTS BY BILLET SEQUENCE CODE

Department: SPECIALTY TREATMENT DEPARTMENT

Billet Number	<u>Title</u>	Designator/ Spec. Code	Rank/ Rate	Section
1. <u>Me</u>	dical Corps.			
36829 40029	Neurologist Head, Dermatology Department	2100/0121 2100/0111	0 – 4 0 – 5	
40049	Dermatologist	2100/0111	0-4	
2.	Nurse Corps.			
34049	Ambulatory Care	2900/0935	0-3	1
301119	Asst. Ambulatory Care Nurse	2900/0940	0-3	2
3. <u>Ph</u>	ysician Assistants.			
36169	Senior Physician Assistant	7540	W-4	1
36189 36191 36209	Physician Assistant Physician Assistant Physician Assistant	7540 7540 7540	W-2 W-2 W-2	1 2 2
3.	Hospital Corpsman.			
34039 31101 34041 31363 31365 36019 40019 40021 35019	Senior Corpsman General Duty Corpsman General Duty Corpsman General Duty Corpsman General Duty Corpsman Adv. Corpsman Dermatology Tech Dermatology Tech Admin. Asst.	8495 8495 8404	E-5 E-5 E-5 E-3 E-3 E-6 E-4 E-4	1 1 2 1 2 1 1 2 1

# TAB B

# WATCH BILL

# INDEX

NUMBER	DESCRIPTION	PAGE
B-1	Medical Corps	19
B-2	Nurse	20
B-3	Physician Assistants	21
B-4	Hospital Corpsman	22

# TAB B-1

# WATCH BILL FOR MEDICAL CORPS

BTI	ـ تظـلـانـا	L'																		
M	Т	W	Т	F	S	S	M	Т	W	Т	F	S	S	M	Т	W	Т	F	S	S
368 AS		AS	AS	N2	E	N1	AS	AS	AS	AS	A1	AS	A2	AS	E	AS	AS	AS	AS	AS
440 AS		AS	AS	AS	AS	E	AS	AS	AS	AS	AS	AS	E	AS	AS	AS	AS	AS	AS	E
440 NS		NS	NS	NS	E	NS	NS	NS	NS	NS	NS	E	NS	NS	NS	NS	NS	NS	E	NS

# KEY:

- A = AM watch (0700-1900).
- N = Night watch (1900-0700).
- E = Excused.
- 1 = ICU 1.
- 2 = ICU 2.
- S = Specialty Treatment Area.

TAB B-2

# WATCH BILL FOR NURSE

ΒI	LLE'	${ m T}$																		
M	Т	W	Т	F	S	S	M	Т	W	Т	F	S	S	M	Т	W	Т	F	S	S
	049 A	А	A	А	А	*	N	N	N	N	N	N	*	A	A	A	A	А	А	*
	119 N	N KE	N Y:	N	*	A	А	A	A	A	A	*	N	N	N	N	N	N	*	N

A = 0700-1900.

N = 1900 - 0700.

\* = Call.

TAB B-3

### WATCH BILL FOR PHYSICIAN ASSISTANTS

BII	LLE:	Γ																		
M	T	W	T	F	S	S	M	$\mathbf{T}$	W	T	F	S	S	M	T	W	T	F	S	S
362	169																			
A2	$\mathbf{E}$	A2	A2	Α3	Α3	Α3	Α3	A2	$\mathbf{E}$	N2	N2	N2	N2	N2	N2	N2	$\mathbf{E}$	A2	A2	A2
362	189																			
AS	AS	AS	AS	$\mathbf{E}$	AS	AS	AS	Α3	Α3	А3	AS	$\mathbf{E}$	NS	NS	NS	NS	NS	NS	NS	$\mathbf{E}$
362	191																			
NS	NS	NS	NS	NS	NS	$\mathbf{E}$	AS	AS	AS	AS	$\mathbf{E}$	AS	AS	AS	А3	А3	А3	AS	$\mathbf{E}$	NS
362	209																			
N2	N2	N2	E	A2	A2	A2	A2	E	A2	A2	A2	А3	А3	А3	A2	E	N2	N2	N2	N2

# KEY:

- A = AM watch (0700 1900).
- N = Night watch (1900-0700).
- E = Excused.
- S = Specialty Treatment Area.
- 2 = Treatment Team 2/Casualty Receiving Area.
- 3 = Treatment Team 3/Casualty Receiving Area.

NOTE: All Physician Assistants will work in the Specialty Treatment Area until activated to work on a treatment team in Casualty Receiving Area. Team 2 will be activated first, then Team 3.

TAB B-4
WATCH BILL FOR HOSPITAL CORPSMEN

								WA'	ГСН	BI:	LL	FOR	но	SPI	TAL	CO	RPS	MEN		
BI:	LLE'	<u>r</u> W	Т	F	g	S	М	Т	W	Т	F	S	S	М	Т	W	т	F	S	S
1-1		V V		T.		<u> </u>	1.1		71		T.		D	1-1		**		T.	D	
36	019	+																		
Α	Α	Α	Α	Α	*	Α	А	А	Α	А	Α	*	А	Α	Α	А	Α	A	*	А
2.4	039																			
	039 A	Δ	Δ	Δ	Δ	*	A	Δ	Δ	Δ	Δ	A	*	Δ	Δ	Δ	Δ	Δ	Δ	*
31	101																			
A	A	A	A	A	E	D	N	N	N	N	N	N	E	A	A	A	A	A	E	D
34	041																			
N		N	N	N	N	E	А	А	А	A	А	E	D	N	N	N	N	N	N	E
	363	_	_	_	_	_							_	_	_	_	_	_	_	_
А	A	А	А	А	А	D	N	N	N	N	N	N	E	А	A	А	А	E	А	D
31	365																			
	N	N	N	N	N	E	A	Α	Α	Α	E	A	D	N	N	N	N	N	N	E
	019		7\	7\	Te.	7\	7\	7\	7\	7\	7\	*	7\	7\	7\	7\	7\	7\	177	А
А	A	А	A	А	Ŀ	А	А	А	А	А	А		А	А	А	А	А	А	Ŀ	А
44	019																			
N	N	N	N	N	N	E	A	Α	A	Α	Α	E	D	N	N	N	N	N	N	E
11	001																			
44 A	021	Δ	Δ	А	Δ	D	N	N	N	N	N	N	E.	Δ	A	Δ	Δ	E	А	D
11	- 1	21	- 1	- 1	21	ט	14	14	14	Τ.	Τ.4	14		- 1	11	2.5	2.1		- 1	ט

# KEY:

A = 0700-1900.

N = 1900 - 0700.

E = Excused.

\* = Call.

+ = Permanent AM watchstander.

# TAB C

# PROCEDURES

# INDEX

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#### TAB C-1

#### **ELECTROSURGICAL APPARATUS**

- A. PURPOSE: To coaqulate blood vessels, tissue or cut tissue.
- B. **<u>DEFINITION</u>**: Employment of the passage of high-frequency oscillating electric currents through tissue between two electrodes to coagulate or cut tissue.

# C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. Electrosurgical unit (Bovie) generator.
- 2. Sterile active electrode tip (blade, loop, ball, or needle tips).
- 3. Conductor cord.
- 4. Grounding device (inactive electrode).
- 5. Electrode gel.
- 6. SF 516 Operation Report.
- 7. Intra-operative Nursing Note.

#### D. CRITERIA:

- 1. Personnel can specify hazards in using electrosurgical unit.
- 2. Only aqueous antiseptic solutions, not alcohol, are used in skin preparation.
- 3. All other electrical equipment used concurrently is plugged into a separate electric power source or is battery operated.
  - 4. Only moist sponges are used on sterile field.
- 5. Use and maintenance of equipment is in accordance with the operating manual.
  - 6. A grounding plate is placed under the patient.
  - 7. Electrosurgical unit is operated at correct current level.

#### E. SPECIAL CONSIDERATIONS:

Quality of current can be controlled and differences in wave form patterns (damping) will determine tissue reaction to the current.

- 1. Coagulating current is a damped current which has a continuous pattern of surges that rapidly diminish to short time periods and gaps. As the current approaches the active electrode, the heat intensity increases and the small vessel end is seared. This is produced by a spark-gap circuit.
- 2. Cutting current is an un-damped waveform which does not diminish but retains a constant output of high-frequency current. It forms an arc between

tissues that cuts the tissue. This is produced by a vacuum tube oscillator.

3. Blended current - is a blend of damped and un-damped waveforms designed to achieve both coagulating and cutting effects.

#### F. STEPS:

- 1. Before bringing the patient into OR Module, Surgical Technician will prepare equipment.
  - (a) Check grounding device cord for frays.
  - (b) Cover grounding plate with electrode paste, if applicable.
- (c) Plug electrosurgical unit into power source and check for function by turning power switch on and off.
  - (d) Set the rheostats (power setting) on the lowest setting.
- 2. After patient is anesthetized and properly positioned, and prior to beginning the preoperative skin preparation, the circulating nurse will:
- (a) Place inactive electrode grounding plate under patient as close as possible to the surgical site without interfering with the sterile field.
  - (1) Loosen the safety strap from the patient's thighs.
  - (2) Roll the patient toward self.
- (3) Position plate under patient's buttock or thigh in area free of hair or scars. Other acceptable sites include the upper arm and abdomen. Avoid bony prominences.
  - (4) Apply pad transversely rather than longitudinally.
- $\$  (5) If using disposable pad, peel protective covering, and apply pad to thigh.
  - (b) Connect inactive electrode to the electrosurgical unit.
  - 3. After draping is done, the Surgical Technician will:
    - (a) Connect appropriate electrode tip to handle and conductor cord.
- (b) Hand end of conductor cord off sterile field to circulating nurse.  $\$ 
  - 4. The Circulating Nurse will:
    - (a) Attach conductor cord to outlet in unit and turn unit on.
- (b) Adjust the setting for cutting and/or coagulation IAW the surgeon's orders.
  - (c) Turn switch off until required by surgeon.
  - (d) Place foot pedal near surgeon's foot, if applicable. Some

active electrodes have a built in hand control.

- 5. Surgeon will operate the electrosurgical unit during the procedure.
- 6. Upon completion of the operation, the circulating nurse will:
  - (a) Disconnect and remove the electrosurgical unit.
  - (b) Turn rheostats to the lowest setting.
  - (c) Turn the unit off.
  - (d) Disconnect active and inactive connections from the unit.
  - (e) Remove the inactive grounding device from patient.
  - (f) Clean electrode paste from patient if grounding plate was used.
- 7. During cleaning up time in OR Module, the OR Tech will:
  - (a) Remove electrode paste from grounding plate.
  - (b) Disinfect equipment with germicidal solution.
  - (c) Move equipment to the side, out of the way.

#### G. SAFETY PRECAUTIONS:

Electrical burn through the patient's skin is the greatest danger in using an electrosurgical unit. The following precautions should be taken:

- 1. Alert anesthesiologist about anticipated use of electrosurgery. Be careful in using around mouth, head, or plural cavity. Follow safety regulations for use with all inhalation anesthetic agents.
  - 2. Place ECG electrodes as far away from operative site as possible.
  - 3. Never use flammable agents, such as alcohol, in skin preparation.
  - 4. Always use new grounding pad when replacement is necessary.
- 5. Connect all other electrical equipment used on patient to a separate electrical power source or use batteries to operate.
  - 6. Use only moist sponges on sterile field to prevent fire.
  - 7. Follow operating manual instructions for use and care of equipment.
  - 3. Ensure that unit bears a current Medical Repair Inspection Tag.

### H. RESPONSIBILITY:

- 1. Circulating Nurse.
- 2. OR Technician.
- 3. Surgeon.

# I. REFERENCES:

Berry and Kohn's Introduction to Operating Room Technique, by L. Atkinson and M. Kohn, McGraw-Hill Book Company.

#### TAB C-2

#### SET UP FOR CLOSED CHEST DRAINAGE

- A. **PURPOSE:** To provide sterile closed chest drainage system for the post operative evacuation of air and fluids from the pleural cavity.
- B. <u>DEFINITION</u>: Insertion of a tube into thorax that is connected to an underwater suction device to cause negative pressure thereby permitting the lung to re-inflate.

# C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. Chest tube (36, 32, or 28 FR straight tube).
- 2. Large sterile hemostat.
- 3. Tubing with straight catheter.
- 4. Underwater seal bottle or device (Pleur-Evac).
- 5. Suture.
- 6. Scalpel blade and handle.
- 7. Suture.
- 8. Betadine prep solution.
- 9. Dressing (xeroform gauze, 4x4s).
- 10. Tape, water proof.
- 11. Sterile distilled water.
- 12. Irrigating syringe (Toomey).
- 13. Thoracic suction machine (Sorensen).

### D. CRITERIA:

- 1. Aseptic technique will be used.
- 2. Lungs inflate after chest tube is inserted.
- 3. Suction is not turned on until ordered by surgeon.

# E. STEPS:

- 1. Circulator will:
  - (a) Prepare Pleur-Evac at work table.
- (b) Fill suction column to  $20\mbox{-cm}$  level with sterile water using Toomey syringe as a funnel.
  - (c) Fill water-seal column to 2-cm level with sterile water.

- (d) Label Pleur-Evac with date and time it was initiated.
- 2. Using sterile technique, the Circulator will pass the chest tube of specified size and 2-way chest tubing onto the sterile filed for surgeon to insert.
- 3. After inserting the chest tube, the surgeon will pass the sterile connecting tube from the field, keeping the tip sterile.
- 4. The Circulator aseptically connects the tubing to the Pleur-Evac collection device.
- 5. The thoracic suction apparatus (Sorensen) is turned on at the direction of the surgeon. Suction is increased until 20 30 cm of water pressure is obtained.
- 6. After sterile dressings are applied, secure all connections with waterproof tape.
- 7. Record the number, size, and type of chest tubes used on the Operation Report in space labeled "Drains."
  - 8. Place drainage system below level of patient's chest.

# F. RESPONSIBILITY:

- 1. Surgeon.
- 2. Circulator, for set up.

#### TAB C-3

#### **DEFIBRILLATION**

- A. **PURPOSE:** To terminate ventricular fibrillation immediately, facilitating the establishment of an effective cardiac rhythm. This is the first and only treatment for ventricular fibrillation.
- B. **DEFINITION:** Also known as precordial shock, it is the conduction of an electrical impulse into the heart to depolarize cardiac muscle and convert fibrillation rhythm into normal sinus rhythm.

# C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. Defibrillator with external paddles.
- 2. Batteries.
- 3. ECG monitor with recorder.
- 4. Conductive medium.
- 5. Cardio Resuscitation Kit (Sparks Kit).
- 6. Oxygen therapy equipment.
- 7. Airways.
- 8. Endotracheal Anesthesia Set.
- 9. AMBU bag.
- 10. Suctioning equipment.

## D. CRITERIA:

- 1. Conversion of an abnormal rhythm following a precordial thump or cough has been well demonstrated in patients with ventricular tachycardia and complete heart block. Recently, it has been demonstrated as well for ventricular fibrillation. Because the speed of defibrillation is critical, a solitary precordial thump is recommended for all witnessed cardiac arrests when a defibrillator is unavailable. When a precordial thump is used in patients who have ventricular tachycardia and a pulse, a defibrillator should be available since ventricular fibrillation can be induced. A precordial thump is delivered to the center of the sternum with the hypothenar aspect of the fist and from a height of no more than 12 inches.
  - 2. Defibrillator battery will be charged and ready to use at all times.
- 3. Person in charge of the arrest will insure all personnel stand clear so that only the patient will receive the electrical current when "ALL CLEAR" is called.

### E. STEPS:

1. Initiate basic cardiac life support (BCLS) and summon defibrillation equipment and assistance.

- 2. Verify ventricular fibrillation by ECG. Correlate with the clinical state of patient.
- (a) Establish an airway or use existing endotracheal tube if in place.
  - (b) Perform external cardiac massage until defibrillator is ready. In the OR, internal cardiac massage may be necessary.
- (c) When patients are monitored and defibrillation equipment is available, proceed with defibrillation.
  - 3. Prepare to defibrillate.
    - (a) Obtain battery operated defibrillator.
    - (b) Check battery level.
- (c) Prepare defibrillator paddles by covering entire metal surface with conductive medium. (The conductive medium is needed to reduce skin resistance to current flow, prevent skin burns, and allow for optimal current flow to the myocardium.)
  - (d) Dial 200 watts/seconds (Joules).
  - (e) Activate charge button to charge unit with electrical current.
- $\,$  (f) Validate that defibrillator unit is in the non-synchronized mode so machine will fire correctly.
- $\,$  (g) Place paddles firmly into position against chest wall using 25-30 pounds of pressure.
  - (1) Best position transverse position.
- $\underline{\underline{a}}$  Place one paddle at 2nd intercostal space right of sternum.
- b Place second paddle at 5th intercostal space midclavicular line, left of sternum.
  - (2) Alternate position anterior-posterior position.
    - a Place one paddle at anterior-precordial area.
    - b Place 2nd paddle at posterior-intrascapular area.
- (h) Recheck ECG rhythm on cardioscope to validate Ventricular fibrillation pattern.
- (i) Give command to stand clear of bed/litter/OR table prior to defibrillation to minimize risk of micro or macro shock to staff.
  - 4. Defibrillate the patient.
    - (a) Depress the discharge button while simultaneously keeping both

paddles in place until the electrical current is delivered.

- (b) Check ECG rhythm on cardioscope for changes in pattern.
- (1) If ventricular fibrillation persists, repeat defibrillation immediately.
  - (2) Continue CPR during any delays in defibrillation.
- $\,$  (3) If a second attempt is unsuccessful, immediately defibrillate with up to 360 Joules.
- $\mbox{\ \ }(4)$  If the ECG monitor shows an organized rhythm, check for a pulse. Continue CPR if no pulse present.
  - (5) If unsuccessful, continue with current ACLS protocol.

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#### VENTRICULAR FIBRILLATION

This sequence was developed to assist in teaching how to treat a broad range of patients with ventricular fibrillation (VF) or pulseless ventricular tachycardia (VT). Some patients may require care not specified herein. This algorithm should not be construed as prohibiting such flexibility. The flow of the algorithm presumed that VF is continuing. CPR indicates cardiopulmonary resuscitation.

#### Witnessed Arrest

#### Unwitnessed Arrest

Check pulse - If no pulse

Check pulse - If no pulse

Precordial Thump

CPR until a defibrillator is available

Check pulse - If no pulse

Check monitor for rhythm - if VF or VT

Defibrillate, 200 Joules b

Defibrillate, 200-300 Joules b

Defibrillate with up to 360 Joules b

CPR if no pulse

#### Establish IV access

Epinephrine, 1:10,000, 0.5-1.0 mg IV push  $^{\circ}$ 

Intubate if possible d

Defibrillate with up to 360 Joules b

Lidocaine, 1 mg/kg IV push

Defibrillate with up to 360 Joules b

Bretylium, 5mg/kg IV push e

(Consider Bicarbonate) f

Defibrillate with up to 360 Joules b

Bretylium, 10 mg/kg IV push <sup>e</sup>

Defibrillate with up to 360 Joules b

Repeat Lidocaine or Bretylium

Defibrillate with up to 360 Joules b

### NOTES:

- 1. Pulseless ventricular tachycardia should be treated identically to ventricular fibrillation.
- 2. Check pulse and rhythm after each shock. If VF recurs after transiently converting (rather than persists without ever converting), use whatever energy level has previously been successful for defibrillation.
  - 3. Epinephrine infusion should be repeated every five (5) minutes.
- 4. Intubation is preferable. If it can be accomplished simultaneously with other techniques, then the earlier the better. However, defibrillation and epinephrine are more important initially if the patient can be ventilated without intubation.
- 5. Some may prefer repeated doses of lidocaine, which may be given in 0.5 mg/kg douses every 8 minutes to a total dose of 3 mg/kg.

6. The value of sodium bicarbonate is questionable during cardiac arrest, and it is not recommended for the routine cardiac arrest sequence. Consideration of its use in a dose of l mEg/kg is appropriate at this point. One half of the original dose may be repeated every 10 minutes if it is used.

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### SUSTAINED VENTRICULAR TACHYCARDIA

This sequence was developed to assist in teaching how to treat a broad range of patients with sustained ventricular tachycardia (VT). Some patients may require care not specified herein. This algorithm should not be construed as prohibiting such flexibility. The flow of the algorithm presumes that VT is continuing. VF indicates ventricular fibrillation; IV, intravenous.

No Pulse		Pulse Present
Treat as VF	Stable	Unstable
	O <sub>2</sub>	O2
	IV Access	IV Access
	Lidocaine, 1 mg/kg	(Consider sedation)°
	Lidocaine, 0.5 mg/kg every 8 min. until VT	Cardiovert <sub>d,e</sub> 50 Joules
	resolves, or up to 3 mg/kg.	Cardiovert, <sub>d</sub> 100 Joules
	Procainamide, 20 mg/min until	Cardiovert, <sub>d</sub> 200 Joules
	VT resolves, or up to 1,000 mg.	Cardiovert, with dup to 360 Joules
	Cardiovert as in unstable patients	If recurrent, add Lidocaine and cardiovert again starting at energy level previously successful; then procainamide or Bretylium.

### NOTES:

- 1. If the patient becomes unstable (see Footnote b for definition) at any time, move to the "Unstable" arm of the algorithm.
- 2. Unstable = symptoms (e.g. chest pain, dyspnea), hypotension (systolic BP <90 mm Hg), congestive heart failure, ischemia, or infarction.
- 3. Sedation should be considered for all patients, including those defined in Footnote b as unstable, except those who are hemodynamically unstable (e.g., hypotensive, in pulmonary edema, or unconscious).
- 4. If hypotension, pulmonary edema, or unconsciousness is present, unsynchronized cardioversion should be done to avoid the delay associated with synchronization.
- 5. In the absence of hypotension, pulmonary edema, or unconsciousness, a precordial thump may be employed prior to cardioversion.
- 6. Once VT has resolved, begin an IV infusion of the antiarrhythmic agent that has aided the resolution of the VT. If hypotensive, in pulmonary edema, or unconscious, use lidocaine if cardioversion alone is unsuccessful, followed by bretylium. In all other patients, the recommended order of therapy is lidocaine, procainamide, and the bretyulium.

### ASYSTOLE (CARDIAC STANDSTILL)

This sequence was developed to assist in teaching how to treat a broad range of patients with asystole. Some patients may require care not specified herein. This algorithm should not be construed to prohibit such flexibility. The flow of the algorithm presumes asystole is continuing. CPR indicates cardiopulmonary resuscitation; VF, ventricular fibrillation; IV, intravenous.

If rhythm is unclear and possibly ventricular fibrillation, defibrillate as for VF.

If Asystole is present

Continue CPR

Establish IV access

Epinephrine, 1:10,000,0.5-1.0 mg IV push <sup>b</sup>

Intubate when possible c

Atropine, 1.0 mg IV push (repeated in 5 min)

(Consider bicarbonate) d

Consider pacing

### NOTES:

- 1. Asystole should be confirmed in two leads.
- 2. Epinephrine should be repeated every 5 minutes.
- 3. Intubation is preferable; if it can be accomplished simultaneously with other techniques, then the earlier the better. However, CPR and the use of epinephrine are more important initially if the patient can be ventilated without intubation. (Endotracheal epinephrine may be used.)
- 4. The value of sodium bicarbonate is questionable during cardiac arrest, and it is not recommended for the routine cardiac arrest sequence. Consideration of its use in a dose of 1mEg/kg is appropriate at this point. One half of the original dose may be repeated every 10 minutes if it is used.

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### ELECTROMECHANICAL DISSOCIATION

This sequence was developed to assist in teaching how to treat a broad range of patients with electromechanical dissociation (EMD). Some patients may require care not specified herein. This algorithm should not be construed to prohibit such flexibility. The flow of the algorithm presumes that EMD is continuing. CPR indicates cardiopulmonary resuscitation; IV, intravenous.

Continue CPR

Establish IV access

Epinephrine, 1:10,000, 0.5-1.0 mg IV push a

Intubate when possible b

(Consider bicarbonate) c

Consider Hypovolemia, Cardiac Tamponade, Tension Pneumothorax, Hypoxemia, Acidosis, Pulmonary Embolism

#### NOTES:

- 1. Epinephrine infusion should be repeated every 5 minutes.
- 2. Intubation is preferable. If it can be accomplished simultaneously with other techniques, then the earlier the better. However, epinephrine is more important initially if the patient can be ventilated without intubation.
- 3. The value of sodium bicarbonate is questionable during cardiac arrest, and it is not recommended for the routine cardiac arrest sequence. Consideration of its use in a dose of 1~mEg/kg is appropriate at this point. One half of the original dose may be repeated every 10~minutes if it is used.

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### PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA

This sequence was developed to assist in teaching how to treat a broad range of patients with sustained PSVT. Some patients may require care not specified herein. This algorithm should be not construed as prohibiting such flexibility. The flow of the algorithm presumes PSVT is continuing.

Unstable Stable

Synchronous Cardioversion Vagal Maneuvers

75 - 100 Joules

Synchronous Cardioversion Verapamil, 5 mg IV

200 Joules

Synchronous Cardioversion Verapamil, 10 mg IV

360 Joules (in 15-20 min)

Correct underlying abnormalities Cardioversion, Digoxin

B-Blockers, Pacing as

indicated

Pharmacological Therapy - Cardioversion

If conversion occurs but PSVT recurs, repeated electrical cardioversion is not indicated. Sedation should be used as time permits.

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### BRADYCARDIA

This sequence was developed to assist in teaching how to treat a broad range of patients with bradycardia. Some patients may require care not specified herein. This algorithm should not be construed to prohibit such flexibility. A-V indicates atrioventricular.

Slow Heart Rate (<60 beats/min) a

Sinus or Second Degree Second Degree Third Degree Junctional A-V Block A-V Block

Type I Type II

Signs or Symptoms <sup>b</sup> Signs or Symptoms <sup>b</sup>

No Yes No

Observe Atropine, 0.5-1.0 mg Transvenous

Pacemaker

Repeat Atropine, 0.5-1.0 mg.

Continued Signs and Symptoms b

No Yes

For Second For Second egree Type II Degree Type I,

or Third sinus or junctional:

Degree:

Continued Signs/Symptoms b

Transvenous Observe

Pacemaker

Yes

External Pacemaker c

or

Isoproterenol, 2-10 mg/min c

Transvenous Pacemaker

## NOTES:

- 1. A solitary chest thump or cough may stimulate cardiac electrical activity and result in improved cardiac output and may be used at this point.
- 2. Hypotension (BP <90 mm Hg), PVCs, altered mental status or symptoms (e.g., chest pain, dyspnea), ischemia, or infarction.
  - 3. Temporizing therapy.

# VENTRICULAR ECTOPY: ACUTE SUPPRESSIVE THERAPY

This sequence was developed to assist in teaching how to treat a broad range of patients with ventricular ectopy. Some patients may require therapy not specified herein. This algorithm should not be construed as prohibiting such flexibility.

Assess for need for

Acute Suppressive Therapy

Rule out treatable cause

Consider serum potassium

Consider digitalis level

Consider bradycardia

Consider drugs Lidocaine, 1 mg/kg

If not suppressed, repeat lidocaine , 0.5 mg/kg every 2-5 min. until no ectopy, or up to 3 mg/kg given

If not suppressed, procainamide 20 mg/min until no ectopy, or up to 1,000 mg given

If not suppressed, and not contraindicated, bretylium, 5-10 mg/kg over 8-10 min.

If not suppressed, consider overdrive pacing

Once ectopy resolved, maintain as follows:

After Lidocaine, 1 mg/kg Lidocaine drip, 2 mg/min

After Lidocaine, 1-2 mg/kg Lidocaine drip, 3 mg/min

After Lidocaine, 203 mg/kg Lidocaine drip, 4 mg/min

After Procainamide Procainamide drip, 1-4 mg/min (check blood

level)

After Bretylium Bretylium drip, 2 mg/min

<sup>4.</sup> Assess patient status and precipitating factors to prevent further decompensation of the patient.

<sup>5.</sup> Provide post defibrillation care.

<sup>(</sup>a) Perform a complete base-line physical assessment of patient. Assess vital signs, peripheral pulses, respiratory pattern, and level of consciousness.

<sup>(</sup>b) Monitor ECG rhythm watching for arrhythmias.

<sup>(</sup>c) Obtain a 12 lead ECG to assess myocardial damage.

<sup>(</sup>d) Administer oxygen to reduce hypoxemic state.

- (e) Assess chest wall for any burns. Apply Silver Sulfadiazine to any burned areas.
- $\mbox{\ensuremath{(f)}}$  Establish an IV line for medication administration, if not present.
  - (g) Administer prescribed medications IAW Physician Orders.
- $\hbox{(1)}\quad \hbox{Monitor drips of antidys rhythmic drugs (lidocaine)} \\$  carefully.
  - (2) Observe patient and ECG pattern for medication effects.
- 6. Document defibrillation on Cardiac Arrest Flow Sheet. Record the following:
- (a) Ventricular fibrillation was observed on monitor. If available, include pre-defibrillation ECG rhythm strip.
  - (b) Number of times defibrillation was attempted.
  - (c) Voltage used with each attempt.
- (d) Post-defibrillation ECG rhythm. Include an ECG rhythm strip if available.
  - (e) Physiological multisystem status.
  - (f) Death.

#### F. PRECAUTIONS:

- 1. Check that equipment is properly grounded to prevent current leakage.
- 2. Disconnect other electrical equipment attached to patient to prevent possible equipment damage from the voltage surge.
- 3. Use conductive medium on paddles conservatively to prevent over arcing of the current flow to the patient.
- 4. Clean defibrillator of remaining electrical current immediately after use. Never set charged defibrillator paddles down.
- 5. Check that defibrillator is in non-synchronized mode such that it is not dependent upon an R wave to trigger defibrillation.

# G. **COMPLICATIONS:**

- 1. Dysrhythmias
- 2. Cardiac arrest
- 3. Respiratory arrest
- 4. Neurological impairment
- 5. Altered skin integrity.

- 6. Pulmonary edema
- 7. Pulmonary or systemic emboli
- 8. Equipment malfunction.
- 9. Death

### H. RESPONSIBILITY:

- 1. Medical Officer will defibrillate the patient.
- 2. Nurse will administer medication, assist with CPR, and record the information in the patient's chart.
- 3. Hospital Corpsman will inspect and maintain the defibrillator equipment and supplies in working order. Supplies for the Sparks Kit will be obtained from Material Management Department.

# I. REFERENCE:

- 1. Interim Guideline for Advanced Cardiac Life Support (ACLS), The American Heart Association.
- 2. Textbook of Advanced Cardiac Life Support (ACLS), The American Heart Association.

#### SHARP ITEM PRECAUTIONS

- A. **PURPOSE:** To dispose of used needles and knife blades in a safe manner. To prevent injury and potential risk of contacting hepatitis, syphilis, malaria, aspergillosis, or Aids.
- B. **DEFINITION:** N/A.

### C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. Needle rack.
- 2. Perforated stainless steel box.
- 3. Needle holder.

#### D. CRITERIA:

- 1. Needles are never discarded loose in trash receptacles.
- 2. Knife blades are always removed from handles before reprocessing is done.
- 3. Sharp objects must be enclosed and secured so they cannot perforate the receptacle.

#### E. STEPS:

- 1. Upon completion of surgical case, the Surgical Tech will:
  - (a) Separate sharp objects from other instruments.
  - (b) Remove knife blades from handles.
    - (1) Point the blade toward table away from self.
    - (2) Remove blades with a needle holder, never use fingers.
    - (3) Place used blades in a non-penetrable box.
- (c) Place reusable surgical needles, either on needle rack or loose, into a perforated stainless steel box.
  - (d) Dispose of needles in a needle-destruction unit.
  - 2. CSR Decontamination Technician will:
- (a) Remove any blades/needles from non-operating room departments in the same manner as the Surgical Technician.
- (b) Run reusable needles, placed in a perforated stainless steel box through the washer-sterilizer.
  - 3. CSR Collection HM will:

- (a) Collect needle destruction units every other day and empty contents into a firm, self-closing box with padded adhesive tape to secure the opening.
- (b) Collect the firm, self-closing boxes located in operating room support space that contain used knife blades.
- (c) Take the sealed, labeled contaminated boxes to Environmental Health Department for final disposition.
- 4. If accidently puncture/cut finger with contaminated needle/knife blade, do the following:
  - (a) Notify area supervisor.
  - (b) Report to Specialty Treatment Area for first aid.
  - (c) Complete an incident report on NAVMED 6010/14 form.

#### F. RESPONSIBILITY:

- 1. OR Technicians.
- 2. CSR Technicians.
- 3. Environmental Health Department.

### OPEN GLOVING TECHNIQUE

A. **PURPOSE:** Sterile gloves are worn to exclude skin as a possible contaminant and to create a barrier between sterile and unsterile areas.

### B. **DEFINITION:**

Open glove technique - gloves are worn alone without sterile gown.

# C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

Sterile gloves by size.

### D. CRITERIA:

- 1. Glove packages are opened away from other packages to avoid any chance of contamination.
  - 2. Hands will never touch outside of sterile glove.
  - 3. Hands will be kept above waist level at all times.

# E. STEPS:

- 1. Wash and dry hands thoroughly.
- 2. Open wrapper with glove section facing upward as shown in enclosure  ${\tt B}$ , figure 1.
- 3. Place inner wrap on clean surface and open as shown in enclosure B, figure 2. Do not touch inside surface of wrapper.
  - 4. With the left hand:
    - (a) Lift the right glove out by the cuff (enclosure B, figure 2).
    - (b) Lift glove straight up from paper wrapper.
- 5. Holding onto the inner surface of folded cuff, pull glove on over fingers as illustrated in enclosure B, figure 3. (Adjust fingers after the second glove is on.)
- 6. Place four fingers of gloved hand under cuff of second glove as shown in enclosure B, figure 4.
- 7. Pull glove on hand keeping thumb up and back; adjust fingers for proper fit.

#### F. REFERENCES:

NAVMED P5066A, Nursing Procedures Manual.

#### SURGICAL PREP

- A. **PURPOSE:** To make the operative site as free as possible from transient and resident micro-organisms, dirt, and skin oil.
- B. **DEFINITION:** Mechanical cleansing of operative site and surrounding area using an antiseptic agent.

### C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. Skin prep tray.
  - (a) Four towels.
  - (b) Two small basins.
  - (c) Sponges 4x8 in., 4x4 in., 3x3 in. sizes.
  - (d) Cotton applicators.
- 2. Betadine solution (paint).
- 3. Betadine scrub (soap).
- 4. Hiblicens (if allergic to Iodine).
- 5. Intra-operative Nursing Note.

#### D. CRITERIA:

- 1. Verify allergy history to iodine before using surgical prep.
- 2. Betadine solution will remain on surgical site to define area of application.
- 3. Sponge will be changed after moving from center of surgical site to periphery.
  - 4. Skin will be dry before sterile drapes are applied.

#### E. STEPS:

- 1. Begin skin prep after patient has been anesthetized and positioned on the operating table.
- 2. Option: Shave hair from surgical site if necessary and not done in  $\ensuremath{\mathsf{OR}}$  Prep and  $\ensuremath{\mathsf{Hold}}$ .
- 3. Expose skin area to be prepared by folding back cotton blanket and gown to 2 inches (5 cm) beyond limits of prep area.
  - 4. Don sterile gloves.
  - 5. Mark limits of prep area with sterile towels above and below site.

- 6. Place sterile absorbent towels along side of site to absorb runoff solution.
  - 7. Wet sponge with Betadine scrub, squeezing out excess solution.
- 8. Scrub skin, starting at site of incision, with a circular motion in ever-widening circles to the periphery.
  - 9. Use some pressure and friction when scrubbing.
  - 10. Discard sponge after reaching the periphery.
- 11. Repeat scrub with a separate sponge for each round for a duration of 5 minutes.
  - 12. Wipe off Betadine scrub and repeat steps 6-10 with Betadine solution.
  - 13. Allow Betadine solution to air dry on skin.
  - 14. See reference for prepping special surgical sites.

#### F. RESPONSIBILITY:

- 1. Surgical Technician.
- 2. Circulating Nurse.

### G. **REFERENCE:**

 $\underline{\text{Berry and Kohn's Introduction to Operating Room Technique}}$  by L. Atkinson and M. Kohn, McGraw-Hill Book Company.

#### PNEUMATIC TOURNIQUETS

- A. **PURPOSE:** To restrict blood flow to an extremity during an operative procedure thereby reducing blood loss and maintaining a cleaner operative field.
- B. **DEFINITION:** N/A.

#### C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. Pneumatic tourniquet.
- 2. 3"unsterile webril.
- 3. Tourniquet cuff.
  - (a) Adult leg 34."
  - (b) Adult arm 24."
- (c) Pediatric extremities 12" to 18" depending on the age and size of the child.

# D. CRITERIA:

- 1. Time will be recorded for time tourniquet was applied, removed, and total time in place.
  - 2. Surgeon will be the only person controlling the use of a tourniquet.

#### E. STEPS:

- 1. Wrap the extremity with webril at the place where the tourniquet is to be located. Avoid leaving any wrinkles in the padding.
- 2. After obtaining permission from anesthesia, apply the appropriate sized cuff to the extremity. Cuff should be snug, but not tight. Position the cuff so that the connector will be protruding laterally to prevent any one from leaning on it thus affecting the pressure during the operative procedure.
- 3. Once the patient has been draped in a sterile manner, the surgeon will call for tourniquet to be inflated to a specific pressure. Set the desired pressure on the control box and inflate. The operation of the tourniquet controls will usually be handled by the anesthesiologist/nurse anesthetist. Start the time clock and record the "up" time on the operative report.
- 4. Check the tourniquet box frequently during the operative procedure making certain that the desired pressure is being maintained.
- 5. Notify the surgeon every half hour (30 mins.) regarding the total tourniquet time.
- 6. Deflate the tourniquet ONLY when so instructed by the surgeon. Stop the time clock and record the "down" time on the operative report, as well as the "total" tourniquet time.

- 7. Should the tourniquet be inflated and deflated more than once during a case, each inflation period will be recorded and totaled, and a final report of all inflation periods will be included on the Operative Report.
- 8. Handle the tourniquet boxes carefully. The pressure regulators can be easily damaged.
- 9. Once a week, wash the tourniquet cuffs using "Ivory" liquid detergent. Be careful not to get any water inside the bladders. Let them air dry in the OR Support Area.

# F. RESPONSIBILITY:

- 1. Surgeon Orders use.
- 2. Circulating Nurse Recording time.

#### TAB C-9 CARDIAC ARREST PROCEDURE

A. **POLICY:** In the event of sudden cessation of breath, heartbeat, or both, every effort shall be made to re-establish respiratory and/or circulatory function as soon as possible. Cardiopulmonary resuscitation shall initiated in each incident, unless counter-manded by a Medical Officer or by written order in the patient's record.

#### B. PROCEDURE:

- 1. After assessment of cardiac or respiratory arrest is made, immediately initiate basic life support.
  - (a) Verify unresponsiveness.
  - (b) Call for help.
  - (c) If unresponsive, open the airway.
  - (d) Check for breathing.
- (e) If not breathing, give 2 full ventilations, 1 to 1 1/2 seconds each.
  - (f) Check carotid pulse.
  - (g) If pulse is absent, start chest compressions 80 100 per minute.
  - 2. Have second person call arrest team.
    - (a) Using field phone state "Code Blue" in.
- (b) Communication personnel will announce over "PA" system "Code Blue" and location of code.
  - 3. Have second or third person bring emergency equipment to the scene.
    - (a) Emergency Cardio Resuscitation Kit.
    - (b) Oxygen cylinder.
    - (c) Suction machine with all catheters attached
  - 4. Members of arrest team will:
    - (a) Perform chest compression (one member)
    - (b) Manage airway and do ventilation (one member)
    - (c) Start an IV
- (d) Draw up and administer medications as directed by ACLS certified member or Medical Officer. (One member)
- (e) Recorder will document arrest on Cardiac Arrest Flow Sheet. This member will be the same throughout the emergency.

### C. VITAL POINTS:

- 1. Basic life support must not be interrupted for more than 5 seconds.
- 2. Advanced life support is only effective if proper basic life support is initiated and maintained.
- 3. Complete specific nursing notes showing the exact time events were done on Cardiac Arrest Flow Sheet.

# D. EDUCATION REQUIREMENTS:

- 1. All medical personnel must maintain Basic Cardiac Life Support (BCLS) certification.
- 2. All medical officers and Critical Care Area Nurses should maintain advanced Cardiac Life Support (ACLS) certification.
- 3. CPR drills will be conducted monthly on all nursing wards in order to assure medical personnel awareness of their role in a code.

### E. RESPONSIBILITY:

The Medical Officer in area.

### REACTION TO MEDICAL EMERGENCIES

- A. PURPOSE: To establish the protocol to react to medical emergencies.
- B. **DEFINITION:** Medical Emergency is a situation causing a life threatening condition that requires immediate medical attention to sustain life.

### C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. Equipment.
  - (a) Crash cart.
  - (b) Litter with blankets.
- 2. Supplies.
  - (a) As provided on Crash cart.
  - (b) As requested by attending Physician.
- 3. Forms.

Chronological Record of Patient Care (SF 600).

### D. CRITERIA:

All equipment properly supplied and functional.

# E. STEPS:

- 1. Shock.
  - (a) Lay patient down with feet elevated.
  - (b) Keep patient warm.
  - (c) Notify medical officer.
- 2. Hemorrhage.
  - (a) Apply direct pressure to area.
  - (b) Notify medical officer.
- 3. Pulmonary arrest.
  - (a) Establish airway.
  - (b) Give mouth-to-mouth.
- 4. Cardiopulmonary arrest.
  - (a) Establish airway.

- (b) Start CPR.
- (c) Notify medical officer.
- (d) Call code.
- 5. Obstructed airway.
  - (a) Clear mouth.
  - (b) Four blows back, four ABD thrusts.
  - (c) Until airway opens.
  - (d) Notify medical officer.
- 6. Emergency procedure for adverse reaction to contrast agents.
  - (a) With hives (urticaria), erythema, itching, or angioedema:
    - (1) Notify attending physician.
  - (b) With the above and dyspnea (difficulty in breathing):
    - (1) Call for help immediately.
- (2) Apply a tourniquet above the injection site to impede venous and lymphatic flow, but not arterial circulation.
  - (3) Protect airway, suction as needed.
  - (4) O2 high flow (10-15 L/min), by reservoir mask.
- $\,$  (5) Patient should be supine with legs elevated unless respiratory distress predominates.
  - (c) Assist the physician or nurse with the following:
    - (1) Start large bore IV with NS TKO.
    - (2) Epinephrine 0.5 mg 1:1000 SQ in opposite arm.
    - (3) Benadryl 50 mg IV push by physician.
  - (d) With BP less than 80 and patient critical:
    - (1) IV NS wide open.
- (2) Epinephrine 1:10,000 0.2mg to 0.3 mg may be given very slowly IV push by physician.
  - (3) Benadryl 50 mg IV push by physician.
- (e) Transport to Casualty Receiving as soon as possible for further definitive care.
  - 7. Simple fainting.

- (a) Lay patient down.
- (b) Keep warm.
- (c) Notify medical officer.

#### AIR SPLINT

- A. **PURPOSE:** To immobilize the extremity to prevent further injury and to control pain.
- B. **DEFINITION:** Splint made of plastic that is inflated.

### C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

Air splint.

#### D. CRITERIA:

- 1. Assessments of distal pulse's, skin color, and temperature will be done prior to and during splinting.
- 2. Splints will extend one joint above and below the fracture site if possible.
- 3. Air splints will be inflated to allow a finger width of space between the extremity and the splint.
  - 4. Two persons will apply splints.

#### E. STEPS:

- 1. Assess distal pulses, skin color, and temperature prior to applying the splint.
  - 2. Select appropriate size and type of air splint.
  - 3. Dress open wounds with sterile dressings.
  - 4. Remove all clothing or jewelry on extremity.
  - 5. Apply the splint.
    - (a) Use splint that is unzipped and deflated.
    - (b) Have assistant hold proximal traction on extremity.
- (c) Grab patient's hand or foot and slide splint over your hand on to the extremity.
- $\,$  (d) Position splint one joint above and below fractured site. If applied to the arm, extend splint beyond the end of the fingers.
  - (e) Maintain traction proximally and distally while inflating.
- $\mbox{\footnotemark}$  (f) Inflate splint to the point at which the finger will make a slight dent against the splint.
  - 6. Monitor circulation checks and pressure of splint every 30 minutes.
  - 7. Do not take x-rays until after splint is applied.

# F. RESPONSIBILITY:

Two Hospital Corpsman.

# G. **REFERENCE:**

Advanced Trauma Life Support Course Manual, American College of Surgeons.

#### THOMAS RING LEG TRACTION SPLINT

- A.  $\underline{PURPOSE}$ : To immobilize the lower extremity to prevent further injury and to control pain.
- B. **DEFINITION:** N/A.

#### C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

Thomas Ring Leg traction splint.

#### D. CRITERIA:

- 1. Assessments of distal pulses, skin color, and temperature will be done prior to and during splinting.
- 2. Manual traction will be performed during the application of the traction device.
  - 3. Two persons will apply splint.

#### E. STEPS:

- 1. Obtain Thomas Ring Leg traction splint.
- 2. Measure the unaffected leg with the traction splint.
- (a) Place upper cushioned ring under the buttocks, adjacent to the ischial tuberosity.
  - (b) Place two support straps above the knee and two below the knee.
  - 3. Dress open wounds.
- 4. Have one person support the leg while the other removes the shoe and sock to perform a circulatory check.
- 5. Have one person apply manual traction to the leg, while maintaining support under the fracture and the calf.
  - 6. Reassess the distal pulse after applying manual traction.
- 7. Have one person maintain manual traction on the leg, while the other applies the ankle hitch around the patient's ankle and upper foot. Make the bottom strap the same length or shorter than the two upper cross straps.
- 8. Gently lift the fractured limb while maintaining support and traction. Slide the splint under the affected leg, with the padded upper ring snugly against the ischial tuberosity.
- 9. Gently lay the leg on the splint and extend the leg elevator. Snugly attach the top strap first.
  - 10. Attach the ankle hitch to the traction hook while supporting the leg.

- 11. Apply traction gently to the leg by turning the windlass knob until the extremity appears stable, or in the conscious patient, until pain and spasm are relieved.
  - 12. Reassess the distal, pedal pulses.
  - 13. Secure the remaining straps.
  - 14. Continually check circulation to the affected extremity.

# F. RESPONSIBILITY:

- 1. Two Hospital Corpsman.
- 2. Medical Officer.

### G. **REFERENCE:**

Advanced Trauma Life Support Course Manual, American College of Surgeons.

### CHEST TUBE INSERTION AND CARE

- A. **PURPOSE:** To assist re-expansion of a lung by providing a system that will collect fluid drainage, blood, or air from the pleural cavity.
- B. <u>DEFINITION</u>: Insertion of a tube into thorax that is connected to an underwater suction device to cause negative pressure thereby permitting the lung to re-inflate.

# C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. Chest tube.
- 2. Chest tube clamps (2).
- 3. Large sterile hemostat.
- 4. Tubing with straight catheter.
- 5. Underwater seal bottle or device (Pleur-Evac).
- 6. Scalpel blade and handle.
- 7. Suture.
- 8. Betadine prep solution.
- 9. Lidocaine 1% with needle and syringe.
- 10. Dressing (zeroform gauze, 4x4s).
- 11. Tape, water proof.
- 12. Sterile gloves.
- 13. Sterile distilled water.
- 14. Irritating syringe (Toomey).
- 15. Suction machine.

#### D. CRITERIA:

- 1. Lungs inflate after chest tube is inserted.
- 2. Aseptic technique will be used.

### E. STEPS:

1. Obtain supplies.

Prepare Pleur-Evac.

- (a) Fill suction column to  $20\mbox{-cm}$  level with sterile water using Toomey syringe as a funnel.
  - (b) Fill water-seal column to 2-cm level with sterile water.
  - (c) Label Pleur-Evac with date and time it was initiated.
  - 2. To insert the chest tube, the Medical Officer will:
- (a) Determine the insertion site: usually the nipple level (5th intercostal space) anterior to the midaxillary line on the affected side.
  - (b) Prep and drape the chest at the predetermined site.
  - (c) Anesthetize the skin and rib periosteum using 1% Lidocaine.
- $\mbox{(d)}$  Make a 2 to 3 cm transverse incision at the site and bluntly dissect through the subcutaneous.
- (e) Puncture the parietal pleura with the tip of a clamp and put a gloved finger into the incision to clear any clots.
- (f) Clamp the distal end of the thoracotomy tube and advance the thoracotomy tube into the pleural space to the desired length.
- $\mbox{\ensuremath{(g)}}$  Look for "fogging" of the chest tube with expiration or listen or air movement.
- (h) Connect the end of the thoracostomy tube to an underwater seal apparatus with  $20\ \text{to}\ 30\ \text{cm}$  of water pressure.
  - (i) Suture the tube in place.
  - (j) Apply a dressing and tape the tube to the chest.
  - (k) Secure all connection sites with waterproof tape.
  - 3. Post chest tube insertion.
- (a) Activate suction by connecting short tubing from suction control chamber to suction machine. Increase suction until slight bubbling appears in suction chamber.
  - (b) Tape clamps to head of bed where visible.
  - (c) Obtain a chest X-ray.
- $\mbox{\ensuremath{(d)}}$  Monitor for air leaks every four hours or more frequently if indicated.
- (e) Check water level every 8 hours and add sterile water to maintain prescribed level.
- (f) Monitor vital signs and breath sounds every 2 hours, or more frequently if indicated.
  - (g) Notify Medical Officer for any acute changes i.e., dyspnea, loss

of breath sounds to affected side or nonaffected side.

- (h) Observe for asymmetrical chest movement.
- (i) Measure drainage.
- $\ensuremath{\text{(1)}}$  Mark level of drainage with date and time at least once a watch or as ordered.
- $\mbox{\footnotemark}$  (2) Record output on Twenty-Four Hour Patient Intake and Output Work Sheet.
- (3) If drainage output exceeds 60 ml/hour, measure hourly, and notify Medical Officer.
  - (j) Milk tubes to maintain patency.
    - (1) Apply lotion to hand used for milking.
- $\mbox{\ensuremath{(2)}}$  Secure and occlude drainage tube with other hand just below connection to chest tube.
- (3) With lubricated hand about 2 inches (5 cm) below, occlude, and milk the tube by pulling away from the patient a distance of 4 to 6 inches (10 to 15 cm).
- (4) Release slowly to prevent "snap" of air back into patient's chest.
- $\mbox{\ensuremath{(k)}}$  Always keep drainage system below level of patient's chest and stabilize Pleur-Evac.

#### F. COMPLICATIONS:

- 1. Chest tube dislodgment from chest wall or disconnection from underwater-seal apparatus.
  - 2. Chest bottle elevated above level of chest.
  - 3. Chest tube kinking or clogging.
  - 4. Introduction of pleural infection.
  - 5. Persistent pneumothorax.

#### G. **RESPONSIBILITY:**

- 1. Medical Officer for insertion.
- 2. Nurse for monitoring.

### H. REFERENCE:

Advanced Trauma Life Support Manual, American College of Surgeons.

### ENCLOSURE A

### RULE OF NINES

The "RULE OF NINES" is used in the hospital management of severe burns to determine fluid replacement. It is also useful as a practical guide to determine critical and minor burn care.

The adult body is generally divided into surface areas of 9% each and/or fractions or multiples of 9% (see illustration below).

# Examples of Burns Acquired In Combat Requiring Hospital Treatment:

- 1. Full-thickness burns.
- 2. Partial-thickness burns exceeding 5% BSA.
- 3. Any serious burns of the face, hands, or feet.
- 4. Burns of the perianal and genital areas.
- 5. Burns that cross flexion creases.

### TREATMENT FOR HEAT CRAMPS

- A. PURPOSE: To reduce cramps by replacing salt lost from the body.
- B. **DEFINITION:** Cramps in voluntary muscles secondary to loss of body salt.

# C. SYMPTOMS:

- 1. Painful cramps of muscles used during work (arms, legs, abdomen, back).
- 2. Normal body temperature.

### D. PREDISPOSING FACTORS:

- 1. Heavy sweating during work in hot environment.
- 2. Drinking large volumes of water without replacing salt loss.
- 3. Not eating MRE (Meals Ready To Eat) food that is high in salt.
- 4. Diuretics and other drugs.
- 5. Alcohol.

# E. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. IV set up with normal saline solution.
- 2. Electrolyte fluids (Gatorade).

#### F. STEPS:

- 1. Offer Gatorade oral fluids.
- 2. If nauseated and unable to take oral fluids, start an IV, and administer 1000 ml of normal saline solution.
  - 3. Stay out of hot sun to rest.

# G. **RESPONSIBILITY:**

Medical Officer.

#### TREATMENT OF HEAT EXHAUSTION

- A. **PURPOSE:** To promote the return of blood to the heart and rapidly cool the body to a normal body temperature.
- B. **DEFINITION:** More severe heat problem characterized by excessive loss of water and salt from the body.

#### C. SYMPTOMS:

- 1. Profuse perspiration.
- 2. Skin pale, or flushed, cool.
- 3. Fatigue extreme weakness.
- 4. Headache, giddiness, mental confusion, but usually conscious.
- 5. Anorexia, nausea, and vomiting.
- 6. May faint on standing with rapidly thready pulse and low BP.
- 7. Oral temperature normal or low but rectal temperature elevated (99-101 degrees F or 37.5 38.5 degrees C).

### D. PREDISPOSING FACTORS:

- 1. Sustained exertion in heat (especially increased temperature and humidity combined).
  - 2. Lack of acclimatization.
  - 3. Failure to replace water and/or salt loss in sweat.

### E. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. Electrolyte fluids (Gatorade).
- 2. IV set up with normal saline solution.
- 3. Rectal thermometer.

#### F. STEPS:

- 1. Place patient in tent near fan.
- 2. Elevate the feet and massage the extremities.
- 3. Administer freely electrolyte fluids by mouth.
- 4. If unable to take oral fluids, start an IV and infuse 2000 ml of normal saline solution.
  - 5. Monitor VS, BP for one hour.

# G. **RESPONSIBILITY:**

Medical Officer.

#### TREATMENT FOR HEAT STROKE (HYPERTHERMIA)

- A. **PURPOSE:** To rapidly cool body to get temperature below 102 degrees F or 38.9 degrees C.
- B.  $\underline{\text{DEFINITION}}$ : Most severe heat problem with a high mortality rate. It is failure of thermoregulatory control with core body temperature exceeding 106 degrees F.

# C. SYMPTOMS:

- 1. Usually onset is sudden.
- 2. Early symptoms are:
  - (a) Absence of sweating.
  - (b) Red, hot, dry skin.
  - (c) Collapse with loss of consciousness.
  - (d) Pulse is full, rapid.
  - (e) BP is normal or elevated.
  - (f) Respiration's are rapid and deep.
- $\,$  (g) Markedly elevated body temperature 106-110 degrees F or 40.5 degrees C and greater.
  - (h) Cramping, twitching, and tenderness of voluntary muscles.
  - (i) Oliguria.
  - 3. Later symptoms are:
    - (a) Cyanosis.
    - (b) Pulse is weak, rapid.
    - (c) Hypotension.
    - (d) Respiration's are shallow, irregular.
    - (e) Depressed deep tendon reflexes.
    - (f) Coma with possible convulsions.
    - (g) Bleeding disorders.

#### D. PREDISPOSING FACTORS:

- 1. Sustained exertion in heat by unacclimatized workers.
- 2. Lack of physical fitness and obesity.

- 3. Recent alcohol intake.
- 4. Dehydration.
- 5. History of heat stroke.
- 6. Diuretics and/or other drugs.

### E. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. Tub of water and ice if possible.
- 2. Ice packs for groin and axillae areas.
- 3. Sheets.
- 4. Hypothermia blanket (if available).
- 5. Oxygen equipment.
- 6. IV set up and normal saline solution.
- 7. Rectal thermometer.
- 8. Cardiac monitor.
- 9. Indwelling urinary catheter with collecting bag.

#### F. STEPS:

- 1. Remove patient's clothes.
- 2. Submerge in tub of water and ice. Remove when rectal temperature reads 102 degrees F to prevent rebound hypothermia.
  - 3. Continually massage extremities to promote vasodilation and heat loss.
  - 4. Alternative is to wrap in wet sheet and blow with fan.
- 5. After temperature has reached  $100\ degrees\ F$ , place on field bed and wrap in blanket.
- 6. Monitor rectal temperature every 10 minutes. It is dangerous to lower temperature below 100 degrees F because there could be a rapid fall in temperature to critical levels.
- 7. If temperature starts to rise, wrap a wet sheet around patient, and turn on fan.
  - 8. Start an IV and administer normal saline solution cautiously.
  - 9. Monitor V.S., BP, and level of consciousness every 15 minutes.
  - 10. Insert an indwelling urinary catheter and measure output hourly.
  - 11. Administer oxygen via nasal or nasal prongs if cyanosis is present.

12. Monitor central venous pressure (CVP).

# G. POTENTIAL COMPLICATIONS:

- 1. Relapse of high temperature.
- 2. Headache for several weeks afterwards.
- 3. Renal failure.
- 4. Disseminated intravascular coagulation (DIC).
- 5. At high risk for second attack of heat stroke, if work in hot environment.

# H. RESPONSIBILITY:

Medical Officer.

#### TREATMENT FOR HYPOTHERMIA

- A.  $\underline{\text{PURPOSE}}\colon$  To gradually rewarm the body to get temperature above 95 degrees F.
- B.  $\underline{\text{DEFINITION}}$ : Core body temperature of no more than 95 degrees F (35 degrees C.
  - 1. Mild 90-95 degrees F (32-35 degrees C).
- $\mbox{\ \ (a)}$  Patient is conscious with mild to moderate clouding of  $\mbox{\ \ mental}$  facilities.
  - (b) Shivering is present but diminished.
  - 2. Moderate 86.9-89.9 degrees F (30-32 degrees C).

Patient has severe clouding of consciousness or may be unconscious.

3. Severe - Below 86 degrees F.

Barely detectable or undetectable respiration's.

### C. SYMPTOMS OF HYPOTHERMIA:

- 1. Low body temperature (below 95 degrees F) as determined by a low reading thermometer or approximation by observing above behaviors.
  - 2. Vital sign alterations.
    - (a) Lower BP.
    - (b) Pulse is slow, irregular, and difficult to palpate.
  - 3. Respiratory alterations.
    - (a) Increased respiration's during mild stages.
- (b) Diminished respiration's as temperature falls below 92 degrees  ${\tt F}$  until no longer detectable.
  - 4. Level of consciousness alternations.
- (a) Poor coordination repeated stumbling, poor control of arms, and legs.
  - (b) Careless attitude, decreased attention span, dazed memory lapses.
  - (c) Drowsiness, blurred speech, confusion.
  - (d) Weakness, slowing pace, unable to maintain muscle movement.
  - (e) Disoriented with possible hallucinations.
  - (f) Collapse, unconsciousness.

- 5. Shivering.
- (a) Increasingly vigorous and uncontrollable near a core temperature of 95 degrees F.
  - (b) Steadily diminishes as temperature decreases.
- (c) Between 86-90 degrees F shivering is replaced by muscular rigidity.
  - 6. General appearance.
    - (a) Pallor.
    - (b) Skin is very cold to touch, edematous.
  - 7. Pupils.
    - (a) Begin to dilate at a core temperature near 92 degrees F.
    - (b) Fully dilated and poorly reactive at around 86 degrees F.

#### D. PREDISPOSING FACTORS:

- 1. Race blacks have a 6:1 ratio of more cold-related injuries compared to Caucasians.
- 2. Geographical origin persons from warm regions are more susceptible to cold injuries.
  - 3. Psychological factors.

Passive, negativistic personality type is more susceptible

- 4. Fatique.
- 5. Rank lower ranks suffer more cold weather problems.
- 6. Previous cold injury.
- 7. Activity under and over activity.
- 8. Medications, drugs, alcohol that interfere with thermoregulatory action of hypothalamus.

# E. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. Low-reading thermometer.
- 2. Heated blankets, towels.
- 3. Cardiac monitor.
- 4. IV solution and set up.
- 5. Oxygen cylinder, nasal or nasal prongs, and heated humidifier.

- 6. NG tube.
- 7. NG tube feeding.
- 8. Cardio-Resuscitation Kit (SPARKS KIT).

### F. CRITERIA:

- 1. Core and peripheral re-warming of body will be done simultaneously.
- 2. Body temperature will be maintained above 95 degrees F. after treatment has been given.

#### G. STEPS:

- 1. Maintain patent airway because patient often has depressed cough reflex.
- 2. Remove wet or constrictive clothing if not previously done.
- 3. Wrap in warm blankets and place in warmed tent.
- 4. Use active external and internal re-warming techniques.
  - (a) Administer warmed normal saline IV solution.
- (b) Administer oxygen via face mask or nasal prongs. Use heated humidified mist if possible.
- (c) Administer warmed tube feeding via NG tube if unconscious. If conscious, offer a hot, sweet drink.
  - 5. Do not massage patient.
- 6. Provide continuous cardiac monitoring because cold heart is electrophysiologically unstable.
  - 7. Option to obtain ABGs and treat acidosis.
  - 8. Monitor temperature rectally.
- 9. Administer steroids such as hydrocortisone, 300 mg/24 hours to maintain cellular integrity.

#### H. POTENTIAL COMPLICATIONS:

- 1. Cardiac arrhythmia's; ventricular fibrillation.
- 2. Cardiovascular collapse (re-warming shock).
- 3. Pulmonary compromise.

#### I. RESPONSIBILITY:

Medical Officer.

#### TREATMENT OF COLD INJURY TO EXTREMITY

A. **PURPOSE:** To re-warm the extremity gradually to determine degree of injury and treat accordingly.

### B. **DEFINITION:**

- 1. Two types of cold injuries are:
- (a) Freezing Type Frostbite (superficial or deep) resulting from exposure to temperatures below the freezing point.
- (b) Non-Freezing Type Chilblains, trenchfoot, and immersion foot resulting from prolonged exposure of feet to wet cold.
  - 2. Four degrees of cold injury are:
- (a) First Degree (Hyperemia and Edema) After re-warming the skin becomes mottled, cyanotic, red, hot, and dry. There is intense itching or burning, and a later deep ache. Swelling begins within 3 hours and may last 10 days. Peeling of skin may begin within five to 10 days after injury and continue for a month.
- (b) Second Degree (Hyperemia and Blister Formation) Blisters appear 6 to 12 hours after injury. The blisters dry forming black exchars 10 to 24 days after re-warming.
- (c) Third Degree (Necrosis of Skin and Cutaneous Tissue) Vesicles may be present but are violet in color, smaller and do not extend to end of digits. Edema of entire foot appears in 6 days. Skin overlying the injury forms a black, hard, dry eschar. Healing takes over two months.
- (d) Fourth Degree (Complete Necrosis and Loss of Tissue) Eschar formation and gangerine may not be evident for 2 to 3 weeks after injury. The result will be amputation of part.

### C. SYMPTOMS:

- 1. Early warning signs not always present are: tingling, stinging, and dull ache followed by numbness.
  - 2. Skin appears red briefly, but then becomes pale or waxy white.
  - 3. Tissue is a little hard, brittle.
  - 4. Lack of sensation and movement.

#### D. PREDISPOSING FACTORS:

- 1. Previous cold injury.
- 2. Wet footgear/socks.
- 3. Exposure to freezing temperatures for 10 hours. Wind will shorten the time to freezing.

- 4. Exposure to cold wet for 3 days at a range of 32 to 50 degrees F.
- 5. Alcohol.
- 6. Activity too little or too much.
- 7. Rank lower ranks have more cold injuries to feet.

#### E. CRITERIA:

- 1. Absolute bed rest will be implemented when patient has a cold injury to foot.
  - 2. Only allowed re-warming methods will be used as indicated below.

### F. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. Litter rack.
- 2. Warm blanket.
- 3. Deep basin.

# G. STEPS:

- 1. Remove clothing from site of injury.
- 2. Cover with blanket.
- 3. Do not apply medications, salves, or ointments to injury site.
- 4. Do not open blisters.
- 5. Offer patient hot oral fluids, if available.
- 6. Place patient on litter and elevate lower extremity.
- 7. Keep on bed rest.
- 8. Unthaw frozen extremity quickly in a water bath controlled of 40 degrees  ${\tt C}$  or 104 degrees  ${\tt F}.$
- 9. Never use snow, ice water, grease, massage, walking, or dry heat to unthaw.
  - 10. If non-freezing injury do not warm above 37 degrees C or 98 degrees F.
  - 11. May prescribe pain medications or narcotics for pain.

### H. RESPONSIBILITY:

- 1. Medical Officer.
- 2. Podiatrist.
- 3. Physician Assistant.

#### INFECTION CONTROL

- A. PURPOSE: To provide quidelines for the prevention and control of infection.
- B. **DEFINITION:** N/A.
- C. EQUIPMENT, SUPPLIES AND FORMS REQUIRED: N/A.

#### D. CRITERIA:

- 1. Personnel will not be a source of, or actively spread infection.
- 2. The environment will be maintained to reduce the risk of the spread of infection.
  - 3. Infectious waste is properly disposed.

#### E. PROCEDURE:

- 1. Reduce risk among personnel.
- (a) Evaluate staff with active infection or a known communicable disease at Military Sick Call and make recommendations regarding patient contact.
  - (b) Eat, drink, and smoke only in designated areas.
- (c) Store no food or beverage items in refrigerators where blood products or medications are stored. Maintain refrigerator temperature in a range of  $(37^{\circ}-40^{\circ}\ \text{F})\ 40^{\circ}\text{C}$ .
- $% \left( d\right) =0$  (d) Practice thorough frequent handwashing before and after all patient care.
- (e) Wear protective clothing and follow procedures IAW CDC guidelines (TAB F-3) when caring for patients with communicable diseases.
- (f) Wear gloves when handling body fluids, secretions, excretions, or exudates as well as materials or objects exposed to them. Remove gloves upon completion of the above, wash hands immediately.
- (g) Attempt to minimize the risk of autoinoculation. Dispose of sharps in impenetrable containers. When full, securely close the container with autoclave tape.
  - 2. Reduce risk among patients.
    - (a) Outpatients.
- (1) Expedite outpatients presenting with signs/symptoms of a communicable disease. Institute appropriate isolation precautions to minimize exposure to staff and other patients.
- (2) Protect examination tables by either a sheet or disposable paper. Change between use by different patients. Clean tables/pads with a

germicidal solution daily and/or immediately should gross contamination occur.

(b) Inpatient.

Follow CDC Guidelines (TAB F-3) making modifications insofar as is necessary in the present structural environment.

- 3. Maintain sterile supplies.
- (a) Rotate sterile supplies uniformly on all shelves and in all storage areas to assure use of supplies prior to expiration date. Place new items on left, use oldest on the right.
- $\mbox{\ \ }$  (b) Check expiration dates and package integrity prior to opening sterile items.
- (c) Items double plastic sealed expire after 6 months from preparation. All other items expire after  $28\ \mathrm{days}$ .
  - (d) Return outdated reusable items to CSR
  - 4. Dispose of used supplies and equipment.
- (a) Cleanse soiled reusable items of gross contamination and return to  ${\tt CSR.}$ 
  - (b) Line all waste receptacles with plastic bag.
- (c) Keep contaminated or infectious waste separate from non-infectious waste. Dispose of contaminated waste in double plastic bags. The outer bag is an orange, autoclavable "biological hazard" bag. When full, seal the inner bag with autoclave tape. Seal the outer bag with filament reinforced tape.
- (d) Deliver properly sealed sharps containers and double bagged infectious waste to the laboratory temporary holding area on a regular basis.
- (e) Ideally, store and transport multiple bags of infectious waste in large covered containers (i.e., "GI" cans with tight fitting lids). Scrub containers with a germicidal solution at least once per watch, more often if grossly contaminated.
- (f) Double bag contaminated linen inside a plastic water soluble bag inside a contaminated linen bag.
  - 5. Keep patient care area environment clean.
- (a) Wet-Vac decks daily (or more often if gross contamination occurs) using a germicidal solution.
  - (b) Damp dust all standing equipment after each use and/or weekly.
  - (c) Follow area cleaning procedures.
  - 6. Clean surgical areas after each case.
    - (a) Separate instruments, linen and waste.

- (b) Put soiled sponges, paper, and disposable items in double plastic bags as described above.
- (c) Rinse instruments in cold water. Place in CSR pick up area. Instruments used on cases requiring blood precautions (i.e. Hepatitis B, AIDS) should be placed in double plastic bags, sealed, and returned to CSR.
- (d) Wipe up all blood spills with a germicidal solution, using a clean cloth, and gloved hand. Cloths used to clean up blood spills are put in contaminated laundry.
- (e) Wipe down all equipment used with germicidal solution or 70% isopropyl alcohol.

#### F. REFERENCES:

Guidelines for the Prevention and Control of Nosocomial Infections, Centers for Disease Control, U.S. Department of Health and Human Services, Public Health Service, Atlanta, Georgia.

#### COMMUNICABLE DISEASES

- A.  $\underline{\text{PURPOSE}}$ : To provide guidelines in the care of persons with a communicable disease.
- B.  $\underline{\text{DEFINITION}}$ : Communicable diseases include those disease conditions known to be contagious.

#### C. CRITERIA:

- 1. Patients having communicable diseases are cared for IAW the guidelines set forth by the Center for Disease Control.
- 2. Reports of communicable disease are initiated to Environmental Health Department.

# D. **PROCEDURE:**

- 1. Identify patient as potentially having a communicable disease.
- 2. Initiate precautions IAW CDC quidelines (TAB F-3).
- 3. Notify Environmental Health if definitive diagnosis will not be made within 24-48 hours.
  - 4. Make diagnosis to confirm or rule out communicable disease.
  - 5. Continue or cancel precautions.
  - 6. Notify Environmental Health Department.

#### E. RESPONSIBILITY:

- 1. Medical Officers.
- 2. Physician Assistants.
- 3. Nurse Corps Officers.
- 4. Hospital Corps.

# PROCEDURES FOR RELEASE OF MEDICAL INFORMATION

- A. **PURPOSE:** To provide procedures of release of medical information within the hospital.
- B.  $\underline{\text{DEFINITION}}$ : Medical Information Information contained in the health or dental record of individuals who have undergone medical examination or treatment.
- C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED: N/A.

#### D. STEPS:

Upon presentation of requests for medical information refer to procedures contained in the following references:

- 1. Manual of the Medical Department.
- 2. Freedom of Information Act BUMEDINST 5720.8.
- 3. Personal Privacy and Rights of Individuals Regarding Records, SECNAVINST 5211.5.
  - 4. Availability of Navy Records, Policies, SECNAVINST 5720.42.

#### E. GENERAL GUIDELINES:

- 1. Information contained in health care records of individuals who have undergone medical or dental examination or treatment is personal to the individual and is therefore considered to be of a private and confidential nature. Information from such health care records, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy, should not be made available to anyone except as authorized by the patient or as allowed by the provisions of Manual of the Medical Department and the Privacy Act of 1974 as implemented by SECNAVINST 5211.5 series.
- 2. Release of information will be coordinated by the Patient Affairs Officer.
  - 3. Personal information of non-medical nature will not be released.
- 4. Personnel in the patients chain of command may be provided with information required to conduct command business but will be referred to the Patient Affairs Office.
- 5. Release of information will conform to local command and superior  $command\ policy$ .
- 6. All Department Heads shall ensure wide dissemination of this information and compliance with procedures outlined herein.

# F. RESPONSIBILITY:

1. Director of Administration.

- 2. Patient Affairs Officer.
- 3. Charge Nurse or Assistant.

#### PROCEDURE FOR PICK-UP AND DELIVERY OF HOSPITAL LAUNDRY

- A. **PURPOSE:** It will be logistically impossible to pick up and deliver laundry at each individual ward and CSR. Therefore, this procedure establishes central collection points and the methodology for preparing laundry for turn-in.
- B. **DEFINITIONS:** N/A.
- C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:
  - 1. Canvas laundry bags.
  - 2. Request for clean linen/laundry.
- D. CRITERIA: N/A.
- E. STEPS:
  - 1. Designated Laundry Petty Officer will:
- (a) Set up laundry bags, tagging one for bed linen, one for clothing (including patient clothing), and one for contaminated laundry.
- (b) Daily at 0800, take the soiled laundry to the nearest Clinical Work Space along with a request for the next day's linen/laundry supply.
  - (c) Distribute cleaned patient clothing.
  - 2. Linen Control Clerks.
- (a) Pick-up and receipt for hospital laundry at each Clinical Work Space.
  - (b) Collect Requests For Clean Linen/Laundry.
- (c) Fill requests submitted the previous day and return cleaned patient clothing.

#### PROCEDURE FOR HANDLING AND LAUNDERING CONTAMINATED LINENS

- A.  $\underline{\text{PURPOSE}}$ : The Combat Zone Fleet Hospital will generate a significant amount of contaminated linen within the operating rooms and treatment wards. These items will require special handling and laundering to prevent the spread of infection.
- B. **DEFINITION:** Contaminated laundry is defined as those items requiring special disinfection and laundering to preclude the spread of infection.

# C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. Chlorine bleach solution.
- 2. Latex gloves.
- D. CRITERIA: N/A.

#### E. STEPS:

- 1. Hospital ward personnel will bag contaminated laundry separate from regular laundry. Gloves are to be worn when handling contaminated laundry.
- 2. Contaminated laundry will be receipted by the Linen Control Clerks and delivered to the laundry.
- 3. At the Laundry all contaminated laundry will be segregated from that requiring only routine processing.
- 4. Based on the next day's requirements and current inventory the contaminated laundry will be assigned a processing priority.
  - 5. The contaminated laundry will be processed as follows:
- (a) Presoak the contaminated laundry for 60 minutes in a chlorine solution of 50 ppm.
  - (b) Wash the linen in hot water using a normal cycle.
  - 6. Once laundered these items will be placed in inventory for re-issue.

#### F. RESPONSIBILITY:

The Head, Environmental Health Department is responsible for routinely monitoring the handling and laundering of contaminated items to preclude the spread of infections.

**CAUTION:** Extreme care must be taken to avoid contact with the contaminated laundry to prevent the spread of infection to laundry and other hospital personnel.

# PATIENT PROCEDURES FOR HANDLING EXPATRIATED PRISONERS OF WAR

A.  $\underline{\text{PURPOSE}}$ : To detail patient handling procedures for expatriated prisoners of war  $\underline{\text{within}}$  the fleet hospital.

#### B. **DEFINITION:**

1. Expatriated prisoners of war (EPW) - those patients who require treatment who are prisoners of U.S. or allied combat forces.

# C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. Restraints (theater command military police or hospital issue).
- 2. Others as specified in admission procedures (all forms will be marked with the words "Prisoner of War" or "EPW").

#### D. STEPS:

- 1. Upon presentation of EPW to functional area, notify Security Department.
- 2. Upon admission to Casualty Receiving, Security will be responsible for the following notifications:
  - (a) Theater command military police (MP) headquarters.
  - (b) Executive Officer.
  - (c) Director of Nursing.
  - (d) Director of Administration.
  - 3. Perform essential life saving care.
- 4. Inform MP that custody of patient will not be assumed by hospital staff and that MP will retain custody of EPW until relieved by appropriate MP headquarters staff or patient is transferred to EPW holding center (external to hospital).
- 5. After treatment, have corpsman or litter bearer escort MP and EPW to next functional area charge nurse. Admissions packet, correctly annotated will be delivered by hand to charge nurse.
- 6. During course of treatment, patient will be guarded by MP and/or restrained until treatment is terminated.
  - 7. Movement to another functional area will be reported to Security.
- 8. EPW's will be fed either on the ward or in the general mess. If allowed to eat in the general mess, EPW's will be accompanied by MP guards.

# E. RESPONSIBILITY:

CMAA/Security.

#### CASUALTY WITH UNEXPLODED ORDNANCE EMBEDDED

- A. **PURPOSE:** To provide guidance in admitting, processing, and treating a casualty who has unexploded ordnance embedded in a body part.
- B. **DEFINITION:** An explosive device (most often from a rifle grenade fired at close range) which has not traveled sufficient distance for fuse detonation and explosion, and is embedded in the body of a casualty.

# C. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

1. Sandbags.

#### D. CRITERIA:

- 1. Sandbags will be stored outside Casualty Receiving Are(a)
- 2. Ordnance removed from the casualty's body without detonation.
- 3. Ordnance removed from the hospital environment without detonation.
- 4. Ordnance disposed of safely.

#### E. STEPS:

- 1. Prepare sandbags.
- (a) Casualty Receiving Senior Corpsman is responsible for filling bags with sand and storing bags in a sheltered area outside Casualty Receiving.
  - (b) Prepare sandbags when setting up area.
  - 2. Care of casualty with unexploded ordnance.
- (a) Place casualty in area removed from other casualties and personnel.
  - (1) Keep casualty outside, if possible.
  - (2) If inside, stack sandbags around the casualty.
  - (3) Have absolute minimum of personnel near casualty.
- $\mbox{\ensuremath{(b)}}$  Call Security and have them summon an explosive ordnance disposal expert.
- (c) Upon determination of what the ordnance is, take additional safety precautions as determined by the attending surgeon in conjunction with the explosive ordnance disposal expert.
- (d) Prepare casualty for removal of ordnance as soon as practicable. If in the OR, stack sandbags around the casualty and immediate operating personnel. All other personnel remain outside the perimeter of sandbags.
  - (e) Tag inpatient record chart to alert other personnel to the

presence of unexploded ordnance prior to transfer from initial intake point.

(f) After removal of the unexploded ordnance, give it to the explosive ordnance disposal expert, who will then dispose of the ordnance in a safe and appropriate manner.

# F. RESPONSIBILITY:

- 1. Casualty Receiving Senior Corpsman.
- 2. Admitting clerk.
- 3. Surgeon.
- 4. Explosive ordnance disposal expert.

# TAB D

# CLINICAL POLICIES/GUIDELINES

# INDEX

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#### TAB D-1

#### SURGICAL GUIDELINES

- A. Whenever abdominal, thoracic, or contaminated surgery is being conducted, simultaneous specialty (Orthopedic, Neurosurgical, Ophthalmological, or Vascular) will not be performed.
- B. Operating microscopes are available at COMMZ only. Microscopes are non-supportable in combat zone. They will be placed in a special augmentation package for Echelon 4. (If damage occurs, microscopes will be exchanged; no repair will be done in the theater.)
- C. All casting materiel is documented in the Casting "G" module using one of the "G" tasks. Time has been documented for the cast tech for casting in the OR as well as for checks of splints, casts, pins, and fixateurs on the wards. This time is 4 minutes once a day.
- D. In all open fractures of extremities a combination of external fixateurs and plastered casting material will be used. For modeling purposes, 75% of the patients will have external fixateurs and 25% will receive plaster material.

#### E. Irrigating Fluids:

- 1. DEPMEDS recognizes the requirement for adequate amount of irrigating fluids. However, emphasis should be placed on using the minimal amount necessary because of the tremendous impact on the logistical system.
  - 2. There will be 2 liters of normal saline per operative case.
- F. Dressings will ordinarily not be changed prior to day 4 post nitial wound debridement at which time the wound will be examined in the OR for further debridement or delayed primary closure. However, a blood soaked dressing, excessive hemorrhage, and/or sepsis may necessitate wound examination and redressing outside the OR. In the database, all wounds that render the patient non-return to duty within the evacuation policy have a dressing reinforcement in 20% of patients. This category of patients otherwise have dressing reapplied as indicated above in the OR if the stay in theater exceeds 4 days. Further, if the stay exceeded 8 days, another dressing change would be done. For patients returning to duty in the theater, the same policy is in use during initial 4 days and periodic dressing change is accomplished depending on the nature and severity of injury.
- G. Blood recovery equipment (or Cell Saver) is available in DEPMEDS at Echelons 3 and 4 and will be used to the maximum extent practical. Anesthesia personnel are responsible to set up and maintain this equipment during operative procedures. Theoretically, this equipment may be used in contaminated and septic cases; however, it is not applied in these cases in the database. The machine requires a liter of sterile saline with 30,000 units of heparin for primary and an additional liter of saline for each unit of blood recovered. Also, it requires a liter for cleaning. The cleaning of the equipment is modeled under the anesthesia area but will be performed by an operating room technician. The set-up consumables are found in CSG 12 and cleaning consumables are in CSG 22.

# TAB E STANDARDS AND JOB DESCRIPTIONS

# INDEX

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#### SPECIALTY TREATMENT AREA EVALUATIVE STANDARDS

- 1. Aseptic technique will be maintained at all times during a surgical procedure.
- 2. Personnel in Minor Surgery will wear scrub top, cap, and mask when doing procedures.
- 3. OR equipment coming in contact with patient will be cleansed with a germicidal solution immediately after each surgical case.
- 4. The cleaning and set up time for a procedure will not exceed 30 minutes.
- 5. On a daily basis, the Specialty Treatment Area including minor surgery will be completely damp dusted and wet-vacuumed with a germicidal solution.
- 6. All emergency equipment will be inspected each watch and the checklist initialed and dated.
- 7. Once opened, instruments, sponges, needles, and supplies remain in Minor Surgery Area until end of the procedure.
- 8. Any contaminated items, sponges, wastes must be placed in plastic lined receptacles, and kept off the floor.
- 9. Safety straps will be applied around patient to secure to OR table.
- 10. Grounding pad will be applied to patient whenever electrosurgical unit (Bovie) is used.
- 11. Chronological record of medical care and pre-operative nursing notes will be completed for each patient undergoing minor surgery.
- 12. All personnel are able to rapidly locate and operate any emergency equipment.
- 13. All personnel are able to locate the correct supplies/equipment for a procedure using procedure cards.
- 14. The patient will be informed about the procedure he is having, type of anesthesia, and told what to expect during the procedure.
- 15. Emergent patients will take priority over stable patients.

#### POTENTIAL HAZARDS IN SPECIALTY TREATMENT AREA

- 1. Possibility of exploding oxygen/gas cylinder tanks if not handled carefully.
- 2. Electric generator failure may occur. Emergency power provisions have been developed to provide backup power only after someone manually turns on the generator. Emergency lights will illuminate immediately. Manually operated suction apparatus will be used until power is restored.
- 3. Electrical shock to OR staff if touching OR table during defibrillation.
- 4. Break in aseptic technique may occur if drape becomes wet, glove is cut, or hands are positioned below the waist level.
- 5. Possibility of electrical burn to patient's skin if electrosurgical apparatus improperly used.
- 6. Risk of exposure to communicable diseases from incoming patients.
- 7. Possibility of needle stick or laceration from needles and knife blades. Report to charge nurse and get medical attention IAW environmental health policy.

# WORKING UNIFORM DURING MINOR SURGERY

- 1. During minor surgery, all personnel assigned to the case will wear:
  - (a) Scrub top.
  - (b) Cap or hood.
  - (c) Face mask.
- 2. Circulating personnel may wear watches and rings.
- 3. Surgical masks will be changed between each case.
- 4. Operating room apparel is located on the linen cart.
- 5. The prescribed uniform of the day will be worn at all other times.

#### ORIENTATION PROGRAM FOR SPECIALTY TREATMENT AREA

#### A. TERMINAL OBJECTIVE:

1. Each person will demonstrate knowledge and skills necessary to work independently in the Specialty Treatment Area. The knowledge and skill level required will be dependent upon billet assigned in the Specialty Treatment Area.

#### B. ENABLING OBJECTIVES:

- 1. Will have completed a two week training course at the Fleet Hospital Training Activity (FHTA), Camp Pendleton, CA. As part of the course, experience will be provided within the Specialty Treatment Area.
- 2. Demonstrate a working knowledge of the physical layout of the Specialty Treatment Area.
- 3. Demonstrate familiarity with the Specialty Treatment Area standard operating procedure manual for the Fleet Hospital.
  - 4. Demonstrate knowledge and skill in performing the following:

#### C. SKILLS:

- 1. Record keeping.
  - (a) Specialty Treatment Area Log.
  - (b) Perioperative Nursing Note.
  - (c) Emergency Equipment Checklist.
  - (d) Standard medical records and forms.
- 2. Location of equipment and supplies.
  - (a) Emergency equipment (Sparks Kit, drug box, and defibrillator).
  - (b) Instrument trays, instruments.
  - (c) Linen packs.
  - (d) Procedure cards for Minor OR.
  - (e) Equipment in all spaces.
  - (f) Supplies in all spaces.
  - (g) Dirty storage areas.
  - (h) Control desk.
- 3. Operation of equipment.
  - (a) Surgical floor lights.

- (b) Electrosurgery unit.
- (c) Defibrillator.
- (d) Litter rack.
- (e) Pneumatic tourniquet.
- (f) Suction machine.
- 4. Minor surgery procedures.
  - (a) Identification of instruments, supplies needed for a case.
  - (b) Set up for minor surgery.
  - (c) Perioperative nursing care.
  - (d) Cleaning after minor surgery.
- 5. Patient assessment and triage.
- 6. Performance of procedures IAW job descriptions (TAB E-6).

#### SPECIALTY TREATMENT AREA CLEANING SCHEDULE

A. PURPOSE: To keep the environment as clean as possible.

#### B. EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:

- 1. 4 scrub basins/buckets.
- 2. Gloves.
- 3. Wet-dry vacuum.
- 4. Scrub brushes.
- 5. Sponge mop.
- 6. Wipes.
- 7. Detergent, GP.
- 8. Germicidal solution.
- 9. Laundry hamper.
- 10. Plastic, laundry bag.
- 11. Plastic trash bag/can.
- 12. Covered container for medical/dental wastes.
- 13. 70% isopropyl alcohol.

# C. CRITERIA:

- 1. The Minor Surgery equipment, table, lights are damp-dusted at the completion of all cases.
  - 2. Cleaning and set up time between each case will not exceed 30 minutes.
- 3. Trash, soiled linens, medical wastes, and instrument trays are removed after each case.
- 4. Daily cleaning will be performed on night watch. During peak states clean during lag periods.
  - 5. Counter tops are cleaned daily.
  - 6. Decks are wet-vacuumed daily.
  - 7. Temper tent equipment, shelving, litter cleaned weekly.

# D. STEPS:

1. After each patient, clean the patient area and restock supplies to be ready for the next admission.

- (a) At completion of each case, segregate and dispose of all used items.
- (1) Roll up contaminated linens and double bag in a plastic bag inside a contaminated laundry bag.
  - (2) Place other linens in cloth laundry bag.
- (3) Place trash in double plastic bags and dispose of in designated trash area.
- (4) Empty drainage bottles into a covered medical waste container.
  - (5) Rinse all used instruments in cold water.
- (6) Disengage all needles and scalpel blades from handles/holders and discard in sharps box.
  - (7) Tag any defective equipment.
- (b) Place all instrument trays and laundry bags on wire cart adjacent to Specialty Treatment Area entrance.
- $\,$  (c) Send used trays, after cleaning, to CSR at 0800 and every 2 hours after that.
  - (d) Prepare germicidal solution in basin according to label on box.
- (e) Wearing gloves, damp dust with germicidal solution or 70% isopropyl alcohol, all equipment used in patient care.
- (f) Place all equipment in neutral position; Mayo stands at low position, dental chairs in low upright position.
  - (g) Allow surfaces to air dry.
- $% \left( h\right) =0$  (h) Empty sump under sink after each case involving application of plaster. Discard firm plaster into trash.
  - 2. Daily cleaning schedule.
- (a) Wash decks with wet-vacuum using germicidal solution on night watch.
  - (b) Wash scrub sink area on night watch.
  - (c) Damp dust shelving in minor operating room area on night watch.
  - (d) Allow surfaces to air dry.
- (e) By 0800, deliver soiled linen to Clinical Workspace 1, Medical Support, for pick up by laundry.
  - 3. Weekly cleaning schedule.

- (a) Wipe down litter rack, storage cabinets, shelving and deck tops.
- (b) Clean the refrigerator and ice machine.

# E. RESPONSIBILITY:

Senior Corpsman or LPO will assign cleaning details to watch.

#### TAB E-6.1

#### AMBULATORY CARE NURSE JOB DESCRIPTION

The Ambulatory Care Nurse is responsible for the direct administration and management of the Specialty Treatment Area. The nurse is responsible for the supervision of all nursing care performed in the Specialty Treatment Area.

#### THE AMBULATORY CARE NURSE WILL:

- 1. Facilitate cooperative interdepartmental working relationships.
- 2. Ensure that quality nursing care is delivered while patient is in Specialty Treatment Area.
- (a) Assess, plan, implement and evaluate patient care in compliance with standards for ambulatory care nursing practice.
- (b) Ensure that emergent patients are identified and given immediate care.
  - (c) Patient is monitored throughout all procedures.
  - (d) Aseptic technique is maintained throughout surgical procedures.
- (e) Coordinate patient care with other departments and services within hospital.
  - (f) Nursing care given is documented.
  - 3. Participate in patient care performing the following tasks:
    - (a) Intubation of a patient with an obstructed airway.
    - (b) Medications including bolus IV drugs.
    - (c) Parenteral drug administration.
    - (d) Cardiac monitoring.
    - (e) Insertion of chest tube.
    - (f) Oxygen administration.
    - (g) Initiate peripheral IV's.
    - (h) Other emergency measures.
- 4. Supervise, schedule, and coordinate administrative activities of the Specialty Treatment Area.
- (a) Ensure that all supplies and equipment are available and functional.
  - (b) Coordinate and schedule minor surgery.
  - (c) Assign staff personnel.

- (d) Ensure that nursing documentation is complete, logs are maintained.
- (e) Comply with established inventory procedures to account for narcotics, controlled drugs, and other dangerous substances.
- (f) Interpret and administer hospital policies and procedures applicable to Specialty Treatment Area.
- $\mbox{(g)}$  Ensure compliance with administrative and managerial procedures contained in hospital instructions.
  - (h) Prepare written personnel performance evaluations.
- 5. Direct orientation and training of personnel assigned to Specialty Treatment Area.
  - (a) Develop inservice classes and cross train personnel.
- (b) Evaluate skill level of personnel before advancement to more complex duties.
- (c) Counsel personnel with deficits, identifying capabilities, and training needs.

#### QUALIFICATIONS:

- 1. Designator 2900/2905.
- 2. NOBC 0935.
- 3. Completion of Advanced Trauma Life Support (ATLS) Course (C-4) is required.
- 4. ACLS certification desired.
- 5. BCLS certified.
- 6. Intermediate LMET Course.
- 7. Fleet Hospital Operations Course graduate.

#### TAB E-6.2

#### SENIOR CORPSMAN JOB DESCRIPTION

The Senior Corpsman is directly responsible to the nurse of the Specialty Treatment Area for the overall performance, military conduct, and appearance of corpsmen assigned to the area.

#### THE SENIOR CORPSMAN WILL:

- 1. Muster personnel. Keep all personnel informed of current activities and/or changes.
- 2. Assist the nurse with coordinating daily staffing, teaching, counseling, and general supervision of corps staff.
- 3. Orient new corpsmen to Specialty Treatment Area.
- 4. Supervise performance of subordinates, including that of professional and military nature.
- 5. Ensure that all tasks are properly completed, aseptic principles are followed, and safety standards are met.
- 6. Maintain high standards of personal hygiene and conduct.
- 7. Maintain clean spaces with strict attention to disinfecting OR area.
- 8. Check and maintain daily availability of administrative and patient care supplies. Receive requests for supplies from OTL, Ocular and Orthopedic corpsmen. Order supplies from:
  - (a) CSR sterile instrument packages.
  - (b) Medical Supply medical supplies.
  - (c) Supply forms and administrative items.
  - (d) Laundry linens.
  - (e) Pharmacy medications.
- 9. Monitor the safety and function of all equipment. Submit work request to Medical Repair and track progress on work requests.
- 10. Ensure staff are familiar with the procedures for fire, cardiac arrest codes, securing weapons, and general safety procedures.
- 11. Ensure proper disposition of contaminated instruments, equipment, and materials.
- 12. Assist corpsmen with patient care and procedures as needed. Serve as resource to corpsmen.
- 13. Responsible for initial assessment and triage of incoming patients.
- 14. Ensure that all logs, radiology requests, tissue reports, and lab chits

have been completed correctly and forwarded to appropriate source with appropriate specimen.

- 15. Prepare and submit watch bills monthly.
- 16. Report to and obtain assistance from the nurse as needed.
- 17. Perform other duties as assigned.
- 18. Pass word to oncoming watch.

# QUALIFICATIONS:

- 1. Petty Officer (E-5 or above) with 8483 NEC preferred.
- 2. BCLS certification.
- 3. LMET-LPO course.
- 4. Suture certification.
- 5. Level II certification IAW NAVMEDCOMINST 6550.3 to initiate and monitor parenteral IV fluids.
- 6. NEC 8404 or 8483 desired.

#### TAB E-6.3

#### STAFF CORPSMAN JOB DESCRIPTION

The Staff Corpsman assigned to the Specialty Treatment Area is responsible for direct patient care, cleanliness, maintenance of supplies and equipment in the area, and completion of administrative tasks associated with these duties.

#### THE STAFF CORPSMAN WILL:

- 1. Administer direct patient care.
  - (a) Assist as circulating corpsman during minor surgery.
  - (b) Apply dressings.
  - (c) Administer medications by all routes except IV push.
  - (d) Initiate and monitor IV fluids.
  - (e) Perform venipuncture for laboratory studies.
  - (f) Catheterize.
  - (g) Assist the OTL, Ocular, and Ortho techs as directed.
  - (h) Apply compresses.
  - (i) Perform wound irrigations.
  - (j) Perform naso-tracheal, tracheal suctioning.
  - (k) Insert nasogastric tube.
  - (1) Administer oxygen.
  - (m) Transport patient, specimens to other parts of the hospital.
  - (n) Suture under direction of Medical Officer.
  - (o) Perform EKG's.
- 2. Keep supplies and equipment maintained and clean.
  - (a) Set up Minor Surgery area prior to surgery.
  - (b) Clean Minor Surgery area after surgery.
- (c) Inventory all patient care and administrative supplies and restock every watch.
- (d) Check all emergency equipment each watch and report malfunctions to Senior Corpsman.
  - (e) Clean patient care areas after each case.
  - (f) Conduct general cleaning each watch and weekly.

- (g) Return used/dirty supplies; pick up new/clean supplies.
- 3. Complete administrative duties.
  - (a) Complete Minor Surgery Log.
  - (b) Fill out laboratory and radiology chits per doctors orders.
  - (c) Complete Perioperative Nurses Note.
  - (d) Complete nursing note on SF 600 when applicable.
  - (e) Pick up laboratory, radiology reports.
- 4. When work complete, report to Senior Corpsman for further assignments.
- 5. Pass word to oncoming watch.

#### QUALIFICATIONS:

- 1. Completion of "A" School (Hospital Corps School).
- 2. BCLS certification.
- 3. Suture certification.
- 4. Level II IV certification IAW NAVMEDCOMINST 6550.3 to initiate and monitor parenteral IV fluids.
- 5. Completion of medication orientation course.
- 6. Fleet Hospital Operation Course graduate.

# TAB F

# REFERENCES

# INDEX

Nursing Procedures Manual.

TAB NUMBER TITLE

F-1 NAVMED P-5066-A

F-2 American College of Surgeons	Advanced Trauma Life Support Course Manual,
	Guidelines for the Prevention and Control of rs for Disease Control, U.S. Department of Health ealth Service, Atlanta, Georgia.
F-4 Guidelines, the American Hear	Advanced Cardiac Life Support (ACLS) Interim
F-5 Guidelines, the American Hear	Basic Cardiac Life Support (BCLS)Interim

# FORMS

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G-21	DD 2064	Certificate of Death (Overseas)	
G-22	DD 599	Patient's Effects Storage Tag	
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# SPECIALTY TREATMENT AREA LOG FORMAT

# LEFT FACING PAGE

DATE	TIME	NAME	SSN	COMMAND	
					<del></del>

# SPECIALTY TREATMENT AREA LOG FORMAT

# RIGHT FACING PAGE

TIME	DISPOSITION	IAGNOSIS	SEEN	AREA	CLINICAL

# **WATCH EMERGENCY KIT CHECKLIST** FHCZ-0401

WARD:\_\_\_\_\_

DATE	WATCH	PERSON CHECKING SIGNATURE/STATUS	CHARGE NURSE 02/PSI DISCREPANCIES FOLLOW-UP SIGNATURE
	AM		
	NOC		
	AM		
	NOC		
	AM		
	NOC		
	AM		
	NOC		
	AM		

NOC AM

# PROCEDURE CARD FORMAT

PROCEDURE:	
Position of Patient:	
Drapes:	
INSTRUMENTS AND EQUIPMENT:	
Instrument Tray:	
Linen Packs:	

SUTURE, NEEDLES AND DRESSINGS:

# MINOR SURGERY LOG

LEFT FACING PAGE

DATE	WARD	OUT PT	PATIENT NAME/ SSN	RATE	SURGICAL T PROCEDURE		END
						<del></del>	

# MINOR SURGERY LOG

RIGHT FACING PAGE

SURGE			-OP DIAGNOSIS			
ASST	ANESTHESIA	POST OP D	IAGNOSIS SPEC	IMEN C	IRCULATE	COMPLICATIONS

# PRE-OPERATIVE SURGICAL CHECKLIST

Date:	<u></u>	
Item	Check if Done	Results/Comments
I.D. Band on		
Surgical/Anesthesia Permit Signed		
History and Physical		
Allergies		
Last Meal		
Lab Work HCT HGB WBC Urinalysis		
Chest x-ray		
Other x-ray		
EKG (When indicated)		
Blood - Type & Crossma	atch	
Blood Type:		
Preoperative Orders		
Anesthesia Pre-op		
Tissue Examination Form Completed		
Operative Area Preppe	d	
Glasses/Contacts/ Dentures Removed		
Pre Operative Medicat	ion:	Time given:
Other:		
Signature of Nurse:		
Name of Patient	Register 1	Number Ward

# PERIOPERATIVE NURSING NOTES FOR MINOR SURGERY

DATE:	MODE OF ARRIVA	L:		
PATIENT IDENTIFICATION BY:				
PRE OPERATIVE DIAGNOSIS:				
PRE OPERATIVE VS: T	P R	BP		
SKIN CONDITION AT SURGICAL S			ALLERGIES:	
MEDICATIONS:				
OTHER:	PRE OP X-RA	YS AVAILABLE:	YES NO	
POSITIONING: SUPINE PRO	NE LATERAL	L R LI	ГНОТОМУ	OTHER
SAFETY STRAP: YES NO_	SHA	VE PREP: YES	NO	
SCRUB PREP AREA BY		WITH		
SCRUB PREP AREA BY TOURNIQUET: YES NO	TIME UP:	DOWN: TO	OTAL TIME:	
PRESSURE	:			
ELECTROCAUTERY: YESN ANESTHESIA: LOCALRE	O GRO	UND PLACEMENT	:	
ANESTHESIA: LOCAL RE	GIONAL	GENERAL		
SURGICAL PROCEDURE:				
TIME RECAN:	NDED			
SURGEON		ASST		
SCRUB		CIRCULA	ГОR	
SURGEONSCRUB	TYPE:			
CAST: YES NO PACKING: YES NO	SITE:			
PACKING: YES NO	_ TYPE:			
DRESSING:				
SPECIMENS: YESNO	_ FROZEN SECTION	ON: YES	_ NO	
	CULTURES: Y			
INTRAOPERATIVE X-RAYS: YES				
POST OPERATIVE DIAGNOSIS:				
POST OPERATIVE CONDITION:				
POST OPERATIVE VS: T	P R	BP		
INSTRUCTIONS:				
DISPOSITION:				
COMMENTS:				
~-~	A MILID II			

TAB G-27
PERSONNEL AUTHORIZED TO DRAW MATERIAL FROM STOCK

FHCZ 1004

	DEPARTMENT
1.	11.
2.	12.
3.	13.
4.	14.
5.	15.
6.	16.
7.	17.
8.	18.
9.	19.
10.	20.
	Approved by:  Department Head
	Date:

TAB G-29
CONTROLLED CONSUMABLES/EQUIPAGE REQUISITION

# FHCZ1003

Item No.	NSN Description	<u>U/I/Qty</u>	Serial #
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
Requi	sitioned by:		_
Appro	oved by:		_
Recei	.ved by:		

TAB G-30
REQUEST FOR CLEAN LINEN/LAUNDRY

DATE

<u></u>	DECORIDETON	OTTX
	DESCRIPTION	QTY
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
REQUESTED BY:	ISSUED BY:	
APPROVED BY:	RECEIVED BY:	